

national European organizations benchmarking patients societies
Evaluation equity efficiency tradeoffs transparency quality
norms government allocation of resources quality **Preferences**
behavior needs **Values** European health policies citizens
Policy/stakeholder advice **Health policy** **Wellbeing** Health management
adequate incentives **Creating Value-Based Health Care**

A Healthy Society for Everyone

Self Evaluation Report

Part B2: Creating Value-Based Health Care

Population health Health economics **Health-Technology Assessment**

Redesigning healthcare

benefits, opportunities and costs International
services and products networks macro
scarcity governance micro
management meso

Health systems

cost-effectiveness **Health care**
caregivers health policies
Comparison technology work together
regional entrepreneurship
Public Health accountability

Sustainability

1 Mission, strategy and ambition

1.1 Vision, mission and objectives

Vision and mission Research Line 'Creating Value-Based Health Care'

The vision of the CAPHRI Research Line 'Creating Value-Based Health Care' (VHC) is to improve population health and wellbeing through better health systems, services and products in all areas of the health care chain. Our mission is to conduct high quality research in order to innovate and create value at a macro, meso and micro level, balancing societal, organisational and personal values in an economic environment where resources are becoming increasingly scarce. With VHC's wide focus on all levels of the health system and our emphasis on values, we reflect CAPHRI's vision of "A healthy society for everyone" and its underlying mission and values.

Objectives

The main objectives of the Research Line (RL) are the following:

- 1 Assessing and improving the cost-effectiveness of health care interventions
 - 2 Assessing and improving the cost-effectiveness of organisational health care arrangements
 - 3 Contributing to insights to improve the sustainability, efficiency and equity of the health care system
 - 4 Supporting operational excellence and (digital) innovation
 - 5 Evaluating public health and health care policy and management
- ... from a regional, national, European and/or international perspective.

1.2 Strategy and Research Area

Since the start of the RL, a working group has worked on creating a joint focus for the RL. This was translated into a joint vision document, which presents the understanding of the vision and mission of the RL and lays the foundation for its strategy. The creation of 'Value-Based Health Care' through research that is relevant for science, policy and society is key and requires the input from various disciplines including health economics, management, sociology, policy science, health technology assessment, health sciences, medicine, logistics, organisation science and innovation science.

Research addresses a macro, meso and/or micro level and balances diverse values across:

- *Health systems and policies (macro)*, with a regional, national, European and international focus on creating integrated, sustainable, efficient and equitable systems and policies for improving health.
- *Health care organisations and networks (meso)*, with a focus on creating well-functioning organisations and integrated networks in the health sector, care sector and other sectors to deliver more effective/cost-effective services and products.
- *Individuals (micro)*, focusing on (the interaction between)

potential service users and patients with formal and informal caregivers.

1.3 Specific targets of the last six years (2017-2022)

The specific targets for the last 6 years have been guided partly by the last external peer review assessment report in 2017, in which the following was stated:

"It is difficult to make specific recommendations from an external perspective. Clearly, there is still much work to do to achieve a coherent strategy. Contract research forms a higher proportion of the funding than for other RLs, which reflects the demand for health economics in particular in many research organisations. This can prove to distract from the main research strategy, so one suggestion would be to try and concentrate on applying for more research grants, to relieve the burden of short term commercial contracts to some extent."

In response, specific targets have been aimed at creating a (more) coherent vision, stimulating and supporting applications for research grants, paying attention to staffing, recruitment and career development and facilitating a stronger media exposure.

A coherent mission

Our vision and mission document is a 'living document' and we have chosen to maintain in the last 6 years the widest possible backing within the RL involving the three research units. Past collaborations within VHC were mainly dependent on project (grant) calls and less of a structural nature. The integration of staff into the research line is part of an ongoing strategy to create (more) coherence. This process of integration is accommodated with regular meetings which are relatively well attended. These include RL meetings with the VHC staff on strategic topics (at least twice per year) and 'match maker' meetings in which staff members from the different units get to know each other better (at least twice per year).

Apply for more research grants

(Further) Decisions on the RLs strategic direction are anticipated to follow from the new CAPHRI strategy. In the meantime, an ongoing strategy of the RL is to support the awareness of - and application for - research grants. We try to achieve this by encouraging individual VHC researchers to take on advisory functions at national and international research funding bodies and other relevant institutions and to create or join local, national and international networks that facilitate applications for (inter)national grants.

Staffing in terms of recruiting and balancing high teaching loads

Staffing has increasingly become a point of attention within the RL, because of growing difficulties to recruit well-qualified new staff. We feel compelled to build career opportunities for young researchers in a labour market where the expertise we require in VHC is attractive to public governmental organisations, consultancies and industry alike. Moreover, many of our colleagues need to continue to balance high teaching loads with research. A couple of measures have been taken in this regard (also see chapter 5). In recent years, we have established six part-time research positions for junior staff (partly on soft money) to increase the number of young research talents. Four positions (for assistant professors) have been supported within the department of HSR and two junior staff members within the department of International Health (also see chapter 5). The FHML Faculty's "Luik 2" resources have gone to three VHC junior researchers to alleviate educational pressure and upgrade research fte.

Facilitate a stronger Media exposure

In the last six years we have facilitated our members to invest in a stronger media exposure to make our research findings visible to policy makers and practitioners in the field and to increase the societal impact. A number of strategic meetings have focussed on tools to grasp social media attention. Despite these efforts, a recent SWOT analysis on VHC level (see chapter 5) has elicited the felt need to showcase our work more. It will be a point for further attention. Aligning potential actions with the changing media strategy at the CAPHRI level is also important in this context.



2 Description of the Research Line's organisation, composition and financing

2.1 Organisation and embedding of the Research Line

The Research Line 'Creating Value-Based Health Care' is one of six research lines within the School CAPHRI. The Research Line has a daily board, which is headed by a chair (Prof. Dr. Aggie Paulus, she succeeded the previous chair (Prof. Dr. Silvia Evers), in November 2021) and a vice-chair (Dr. Timo Clemens). Researchers of VHC mainly work at the following departments: Health Services Research and International Health (both Maastricht University) and Clinical Epidemiology and Medical Technology Assessment (Academic Hospital). Following the main research themes, the RL consists of three research units: Redesigning Health Care; Health Economics/Health Technology Assessment; Comparative Health.

There are monthly meetings of the management team (incl. the chair, vice chair and the leaders of the three units of the main research themes). The leaders of the units also bear the financial responsibility of their respective units. As researchers of the Health economics/Health Technology Assessment Unit

belong to two separate organisational entities (Maastricht University; Academic Hospital), there are two separate budget holders for this particular unit. Both attend the monthly meeting of the management team. There are three-monthly meetings with the entire research staff of VHC.

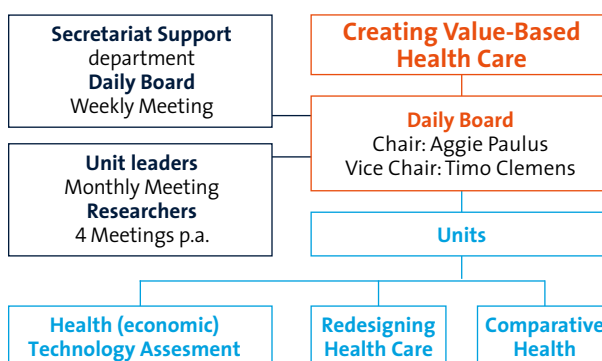


Figure 2.1 Organisation Chart Research Line "Creating Value Based Health Care"

2.2 Composition

Table 2.2 Research staff at Research Line level (2017-2022)

Research staff	2017	2018	2019	2020	2021	2022
	# / fte	# / fte	# / fte	# / fte	# / fte	# / fte
Scientific staff FHML ¹	17 / 6.25	19/6.9	19/ 7.25	19/6.98	22/7.5	25/8.5
Scientific staff azM	7 / 2.63	7/2.6	5/ 2.39	3/0.81	3/0.8	3/0.8
Postdocs ²	11 / 6.85	7/4.6	14/ 7.77	14/8.73	14/8.4	11/6.9
Internal PhD candidates ³	17 / 15.70	18/19.1	15/ 14.10	14/13.00	14/13.3	11/10
	52 / 31.43	51/33.2	53/ 31.51	50/ 29.52	53/30.00	50/26.1
External PhD candidates ⁴	49	67	69	89	93	105

¹ Categories Prof / Assoc. Prof / Assist. Prof; tenured and non-tenured staff appointed at the FHML.

² Category Researcher (1, 2, 3, 4), with completed PhD, not belonging to scientific staff (note 1)

³ Standard PhD (employed)

⁴ External PhD (externally or internally funded but not employed)

Over the last six years, the internal research staff of VHC, on average, was about 30.3 fte (ca. 52 staff members). These include scientific staff members; postdocs and internal PhD candidates (see Table 2.2). The external staff of VHC consists of external PhD candidates. Compared to internal PhD candidates (the # of which has been slowly decreasing since 2018), the number of external PhD candidates has been increasing. The latter is in line with developments we also see at the CAPHRI-level. VHC staff members have mixed feelings about this development, as they see both benefits (e.g. possibilities to cooperate with national and international organisations where external PhD candidates are employed) and drawbacks (e.g. increased supervision workload of internal (senior) staff members).

2.3 Financing

The funding in table 2.3a only relates to the Maastricht University part of the programme, the additional funding granted through the Maastricht University Medical Centre azM, mainly Clinical Epidemiology and MTA (KEMTA) is not included.

Table 2.3a: Funding at Research Line level (2017-2022)

Funding	2017		2018		2019		2020		2021		2022	
	Fte	% ⁶	fte	% ⁶	Fte	% ⁶	Fte	% ⁶	Fte	% ⁶	Fte	% ⁶
Direct funding ¹	6.15	21%	6.7	22%	6.5	22%	5.8	20%	5.8	20%	6	24%
Research grants ²	3.70	13%	3.6	12%	7.2	25%	8.7	31%	6.8	24%	6.2	25%
Contract research ³	15.95	55%	19.2	63%	15.2	53%	14	49%	15.6	54%	12.7	50%
Other ⁴	3.00	10%	1.0	3%	0.0	0%	0	0%	0.6	2%	0.4	2%
Total funding⁵	28.8	100%	30.5	100%	28.9	100%	28.5	100%	28.8	100%	25.2	100%

¹ Direct funding by FHML/ Maastricht University ('basis financiering' / lump sum budget).

² Research grants obtained in national scientific competition (e.g. grants from NWO, ZonMw and KNAW)

³ Research contracts for specific research projects obtained from external organisations, such as industry, governmental ministries, European organisations, including ERC, and charity organisations

⁴ Funds that do not fit the other categories.

⁵ The funding in fte includes the total research staff but excludes the academic hospital-staff

⁶ the funding in % in the research programme should be compared to the total within each research programme

Table 2.3a and 2.3b show the funding and earning power of the research line. Direct (first line) funding is approximately 21% of the total funding within the RL. The remaining part of the funding is obtained through research grants (e.g. grants from ZonMw, NWO), contract research (e.g. European ERC grants; grants from government bodies; insurance companies; EIT; Health care organisations; etc., see Table 2.3b) or other grants. Compared to 2017, the percentage of research grants has been slowly increasing, while the percentage of contract research has remained more or less stable over time (see Table 2.3a). The total number of grants obtained within the RL ranges from approximately 1.0 million euro to 1.9 million euro per year.

Table 2.3b: Research Grants at Research Line level (2017-2022)

Grants	Order	Grant title	Principal Investigator	2017	2018	2019	2020	2021	2022
Grants	30951412N	VIMP Taming Uncertai	M. Joore	€49.983					
	30951413N	ZonMw Sanics II	M. Hiligsmann	€19.950					
	30951417N	ZonMw TANGO	M. Joore	€159.121					
	30951418N	Optimizing osteo_HSR	M.Hiligsmann	€184.901					
	30951420N	Zonmw AiG voorbereiding	D. Ruwaard	€25.000					
	30951426N	ZonMw CHECKUP	S.Evers		€12.134				
	30951427N	ZonMw AIG 2018-2021	D. Ruwaard		€749.630				
	30951429N	ZonMw-tom-synthese	M. Joore		€19.850				
	30951430N	ZMLE-interventie	S.Evers		€50.000				
	30951431N	ZonMw PCI project	B.Ramaekers		€144.550				
	30951432N	ZonMw-ZL Kennis-agenda	M. Janssen		€142.450				
	30951437N	ZonMw Doet de gezonde School ertoe	M. Janssen		€536.209				

	30951438N	ZonMw Positieve Gezondheid	D. Ruwaard		€100.000					
	30951440N	ZonMw armhand- functie	S. Evers			€48.459				
	30951441N	NWO - CARRIER	M. Spreeuwenberg			€370.994				
	30951442N	ZonMw Trendbreuk	M. Janssen			€24.825				
	30951461N	Hospitals' adaptations to COVID-19	D. Westra				€385.000			
	30951462N	ZonMw - EPA-teams	S. Evers				€157.000			
	30951467N	ZonMw - FLOW project	M. Hiligsmann					€33.997		
	30951468N	ZonMw- Incontinentie	S. Evers					€44.648		
	30951471N	ZonMw gezonde Kinderopvang	M. Janssen					€107.485		
	30951475N	ZonMw- Leerplatform richtlijnen	S. Evers					€122.485		
	30951478N	ZonMw- #HASHTEK	S. Evers					€50.000		
	30951480N	Brede Benadering Gezondheid	M. Spreeuwenberg					€742.180		
	41150214021N	ZonMw - CoLaIC	S. Evers						€23.651	
	41150216017N	VENI 2021_D. Westra	D. Westra						€279.855	
	41150216018N	ZonMw - VIMP Covid19	D. Westra						€50.000	
Grants Total					€438.955	€1.754.823	€444.278	€542.000	€1.100.795	€353.506
Contracts	30951414N	Case-mix model	D. Ruwaard	€200.000						
	30951415B	Evaluatie Soc.agenda	M. Janssen	€148.352						
	30951416B	Chafea-Sogeti	M. Pavlova	€21.000						
	30951422N	H2020 PECUNIA	S. Evers	€384.831						
	30951424B	Ontwikkeling Jeugd GGZ	D. Ruwaard	€49.518						
	30951425N	4Limburg_1.1/ gov	M. Janssen	€72.573						
	30951428N	Promoting Healthy LS	H. Brand		€32.469					
	30951434N	EU-PREVENT IT	P. Schröder		€53.177					
	30951435N	Maastricht- Heuvelland	D. Ruwaard		€50.000					
	30951436N	Erasmus+_ CoCoCare	S.M.A.A. Evers		€67.994					
	30951446N	York- Maastricht	P. Schröder			€14.900				
	30951451N	IPCZ Onderzoek	D. Ruwaard			€243.831				
	30951452N	Vervolg- onderzoek HZD	D. Ruwaard			€124.000				

	30951453N	Real World Data	H. Brand				€94.750		
	30951454N	Treatable Mortality	H. Brand				€88.250		
	30951455N	Coop4Health	T Clemens				€391.758		
	30951458B	Radius Health	M.J.C. Hiligsmann				€92.800		
	30951460B	DCE-HIV	M.J.C. Hiligsmann				€62.517		
	30951464N	ICA Double Dose	S.M.A.A. Evers					€239.102	
	30951465N	EIT - Food-4Health	S.M.A.A. Evers					€35.000	
	30951466N	Erasmus+_HELEM-EU	H. Brand					€40.208	
	30951470N	PhD traject HSR-DAD	M.J.C. Hiligsmann					€0	
	30951476N	NIH - NAWA	K.M. Czabanowska					€13.510	
	30951479N	LolaHESG2022	S.M.A.A. Evers					€0	
	41150213010N	Sigma_Global Nursing	K.M. Czabanowska						€28.200
	41150214022N	ReumaNL-Model Ziektelast	M.J.C. Hiligsmann						€62.189
	41150215006N	Horizon EU - PRE-ACT	M.A. Joore						€422.765
	41150216019N	LIME 2.0 Spreeuwenberg	M. Spreeuwenberg						€60.000
Contracts Total				€876.274	€203.640	€382.731	€753.137	€327.820	€573.154
Other	30951439B	Kosten Diabeteszorg	A.M.J. Elissen				€104.000		
	30951448B	Regiofoto Maastricht Heuvelland	D. Ruwaard				€54.827		
	30951449B	Ontwikkeling ziekte-modellen	M.A. Joore				€30.000		
	30951450B	Keuzehulp farmacotherapie type 2	D. Ruwaard				€120.000		
	30951469B	Hy2Care onderzoek	M.J.C. Hiligsmann					€15.000	
	30951472B	Case-mix model_NZa	D. Ruwaard					€121.000	
	30951474B	mini-HTA - Vilans	S.M.A.A. Evers					€15.000	
	30951477B	Integrale effectmeting	M.W.J. Janssen					€178.868	
Other Total						€308.827	-	€329.868	
Grand Total				€1.315.229	€1.958.463	€1.135.836	€1.295.137	€1.758.483	€926.660

3 Research Quality and Societal Relevance

3.1 Research quality

3.1.1 Research products for peers

Main categories of research output at Research Line level

Since 2021 FHML is using the KUOZ categories for the P&C reports regarding publications. Publications classified as KUOZ category A 'Refereed journal article' are presented below. Please note that - in contrast to KUOZ reports - items do not have to be printed to be included for P&C reports; e-publications are also included.

Table 3.1a: Main categories of research output (2017-2022)

Research output	2017	2018	2019	2020	2021	2022
Refereed journal articles	208	242	228	297	294	289
PhD theses involved/accounted	18 / 12.1	13/10.8	13/9.0	11/10.8	9/7.8	11/9.0

SEP types	Counts
Non-refereed article	19
Refereed journal article	1632
Book (authored)	2
Book chapter	31
Book editing	1
Dissertation 1 (IDIP)	41
Dissertation 2 (IDEP)	35
Inaugural Lecture	3
Not eligible	11
Other conference contribution (abstract, poster)	12
Refereed conference publication	4
Report	28
Web publication	61

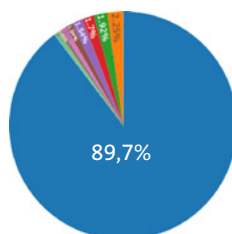


Table 3.1a shows the main research output of the RL VHC. Compared to 2017, the number of refereed journal articles has been increasing, with almost 300 published refereed journal articles on average per year in 2020 and 2021, respectively. Almost 90% of the research output of VHC concerns refereed articles (See figure 3.1.1, indicated in blue). Table 3.1.a shows that the number of PhD theses has been slowly decreasing, especially in 2020 and 2021. Delays because of Covid-19 and the fact that external PhD students often conduct their PhD trajectory while working might be explanations for this. The research line follows the CAPHRI policy concerning PhD programme, talent policy, scientific integrity and diversity. See part A for more information on CAPHRI's PhD Programme.

Figure 3.1.1 Research output VHC 2017-2022

Most important scientific publications

Table 3.1b gives an overview of some important scientific publications of VHC in 2017-2022. Publications have been selected for various reasons. First, because of their immediate impact for practice (e.g. Wijnants et al., 2020; 2021). Secondly to represent the research taking place in the three research units: Health economics/HTA (van Kampen et al., 2017; Kremer et al., 2020; Pokhilenko et al., 2020; Mutyambizi et al. 2020); Redesigning Health Care (Elissen et al., 2017; Smeets et al., 2021; Gifford et al., 2021) and Comparative Health (Schröder-Bäck et al., 2019; Azzopardi-Muscat, 2018). Thirdly, to illustrate the scope, nature and multi- disciplinaryity of VHC-research. The latter includes research on/for different levels: local/national level (van Kampen et al., 2017; Elissen et al., 2017; Kremer et al., 2020); level of organisations/network (Gifford et al., 2021; Smeets et al., 2021); European (Schröder-Bäck et al., 2019; Azzopardi-Muscat, 2018; Pokhilenko et al., 2020) and international level (Mutyambizi et al. 2020; Wijnants et al.,

2020/2021). They also illustrate the fact that research concerns both methodological research on governance (e.g. Schröder-Bäck et al., 2019), economics (e.g. Pokhilenko et al., 2021) and evaluation (e.g. Smeets et al., 2021) as well as applied research. These references also represent the balancing of different values across the different levels mentioned in 1.2 (e.g. the use of shared decision-making, see Kremer et al., 2020). From 2017 to 2022, the open access (OA) status of VHC publications has steadily increased. In 2022, almost 40% of all publications had a Gold DOAJ status, i.e. they are freely available under an open license on the publisher site, published in a fully-OA journal recognised by the Directory of Open Access Journals (DOAJ). Almost 4% had a Gold non DOAJ status (free under an open license of the publisher site, published in a fully OA journal that is not (yet) recognised by DOAJ) and almost 30% a Hybrid status (Free under an open license on the publisher site, published in a toll-access journal).

Table 3.1b: Most important scientific publications (top 10/2017-2022)

Year	Publication
2017	van Kampen, R. J. W., Ramaekers, B. L. T., Lobbezoo, D. J. A., de Boer, M., Dercksen, M. W., van den Berkmortel, F., Smilde, T. J., van de Wouw, A. J., Peters, F. P. J., van Riel, J. M. G., Peters, N. A. J. B., Tjan-Heijnen, V. C. G. & Joore, M. A. Jul 2017 Real-world and trial-based cost-effectiveness analysis of bevacizumab in HER2-negative metastatic breast cancer patients: a study of the Southeast Netherlands Breast Cancer Consortium, In : European Journal of Cancer. 79, p. 238-246
2017	Elissen AMJ, Hertroijs DFL, Schaper NC, Bosma H, Dagnelie PC, Henry RM, Van der Kallen CJ, Koster A, Schram MT, Stehouwer CD, Schouten JSAG, Tos TJ, Berendschot TTJM, Ruwaard D. Differences in biopsychosocial profile of diabetes patients by level of glycaemic control and health-related quality of life: The Maastricht Study. Plos One 2017; 12(7): e0182053 (https://doi.org/10.1371/journal.pone.0182053).
2018	Natasha Azzopardi-Muscat, Rita Baeten, Timo Clemens, Triin Habicht, Ilmo Keskimäki, Iwona Kowalska-Bobko, Anna Sagan, Ewout van Ginneken, The role of the 2011 patients' rights in cross-border health care directive in shaping seven national health systems: Looking beyond patient mobility, Health Policy, Volume 122, Issue 3, 2018, Pages 279-283,
2019	Schröder-Bäck, P., Schloemer, T., Clemens, T., Alexander, D., Brand, H., Martakis, K., ... & Blair, M. (2019). A Heuristic Governance Framework for the Implementation of Child Primary Health Care Interventions in Different Contexts in the European Union. <i>INQUIRY: The Journal of Health Care Organisation, Provision, and Financing</i> , 56, 0046958019833869.
2020	Kremer IEH, Hiligsmann M, Carlson J, Zimmermann M, Jongen PJ, Evers SMAA, Petersohn S, Pouwels XGLV, Bansback N. Exploring the Cost Effectiveness of Shared Decision Making for Choosing between Disease-Modifying Drugs for Relapsing-Remitting Multiple Sclerosis in the Netherlands: A State Transition Model. <i>Med Decis Making</i> . 2020 Nov;40(8):1003-1019. doi: 10.1177/0272989X20961091. PMID: 33174513; PMCID: PMC7672783.
2020	Mutyambizi, C., Pavlova, M., Hongoro, C., & Groot, W. (2020). Inequalities and factors associated with adherence to diabetes self-care practices amongst patients at two public hospitals in Gauteng, South Africa. <i>BMC Endocrine Disorders</i> , 20(1), [15]. https://doi.org/10.1186/s12902-020-0492-y
2020	Pokhilenko, I., Janssen, L. M. M., Evers, S. M. A. A., Drost, R. M. W. A., Simon, J., Koenig, H-H., Brodsky, V., Salvador-Carulla, L., Park, A-L., Hollingworth, W. W., Paulus, A.T.G. (2020). Exploring the identification, validation, and categorisation of costs and benefits of education in mental health: The PECUNIA project. <i>International Journal of Technology Assessment in Health Care</i> , 36(4), 325-331.
2020/2021	Wynants L, Van Calster B, Collins GS, Riley RD, Heinze G, Schuit E, Bonten MMJ, Damen JAA, Debray TPA, De Vos M, Dhiman P, Haller MC, Harhay MO, Henckaerts L, Kreuzberger N, Lohman A, Luijken K, Ma J, Andaur CL, Reitsma JB, Sergeant JC, Shi C, Skoetz N, Smits LJM, Snell KIE, Sperrin M, Spijker R, Steyerberg EW, Takada T, van Kuijk SMJ, van Royen FS, Wallisch C, Hooft L, Moons KGM, van Smeden M. Prediction models for diagnosis and prognosis of covid-19 infection: systematic review and critical appraisal. <i>BMJ</i> . 2020 Apr 7;369:m1328. doi: 10.1136/bmj.m1328. Update in: <i>BMJ</i> . 2021 Feb 3;372:n236. Erratum in: <i>BMJ</i> . 2020 Jun 3;369:m2204. PMID: 32265220; PMCID: PMC7222643. Impact factor 2020: 30.223
2021	Gifford R, Fleuren B, Baan F van de, Ruwaard D, Poesen L, Zijlstra F, Westra D. To Uncertainty and Beyond: Identifying the capabilities needed by hospitals to function in dynamic environments. <i>Medical Care Research and Review</i> 2021 (https://doi.org/10.1177/10775587211057416).
2021	Smeets RGM, Hertroijs DFL, Mukumbang FC, Kroese MEAL, Ruwaard D, Elissen AMJ. First things first: how to elicit the initial programme theory for a realist evaluation of complex integrated care programmes. <i>The Milbank Quarterly</i> 2021, 39 (https://doi.org/10.1111/1468-0009.12543).

3.1.2 Use of research products by peers

Figure 3.1.2 provides an overview of the Category Normalised Citation Impact (CNCI). This score is based on 877 VHC publications mentioned for 2017-2020 in the DashBoard of the University Library. The CNCI is the ratio of citations received by an output, against the average for other outputs of the same age, publication type and subject area. The strength of this indicator is that it corrects for differences in citation frequencies that are attributable to age, document type and subject area, which makes it suitable for benchmarking. A CNCI of > 1 means that a publication is cited more frequent as the world average regarding its publication year, document types and subject area.

Figure 3.1.2 shows that approximately 34% of VHC publications have a CNCI score of >1. More than 2.7% of our publications is cited more than 4 times the world average and 1.14% more than 8 times the world average.

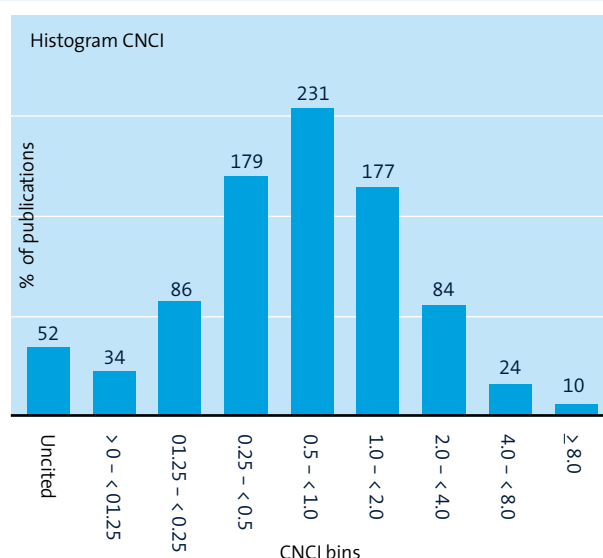


Figure 3.1.2 Category normalised citation impact VHC publications, 2017-2020

3 Research Quality and Societal Relevance

3.1.3 Marks of recognition from peers

Scientific Awards or Public Societal prizes

Table 3.1c shows national and international awards and recognitions from peers for VHC research activities. These include awards for papers, PhD-dissertations and publications, such as Care Awards for best dissertations, Best Paper Awards, Karolinska Medical Management Centre & EHMA Research

Award and Early Career Excellence Award. Furthermore, they relate to recognitions of research contributions by individual VHC researchers, including medals and honorary positions. These include, among others, the ESCEO Medal of Excellence 2018 and the Silver Medal for Academic Achievement as well as honorary memberships and honorary professorships.

Table 3.1c: Most important scientific awards and public societal prizes (2017-2022 max. top-10)

Year	Name	Scientific Awards/Public Societal prizes	Which organisation
2017	B. Wijnen	'Health technology assessment in epilepsy; moving towards patient-centered and efficient care' 5 July 2017: Winner of the Care award for best PhD thesis	CaRe
2017	P. Schröder-Bäck	Honorary Member of the Faculty of Public Health	UK Faculty of Public Health
2017	B. Wijnen/ R de Kinderen/ S. Evers	Best HTA publication award Wijnen et al, A comparison of the responsiveness of EQ-5D-5L and the QOLIE-31P and mapping of QOLIE-31P to EQ-5D-5L in epilepsy. The European Journal of Health Economics 19 (6), 861-870	Dutch Association of Technology Assessment in Healthcare (NVTAG)
2017	M. Pavlova	Honorary University Professor at Corvinus University of Budapest. Inaugural lecture delivered on 2 May 2017 at Corvinus University of Budapest	Corvinus University of Budapest
2017	S. Grimm	Value in Health Paper of the Year Award 2017	Value in Health Journal
2018	M. Hiligsmann	ESCEO Medal of Excellence 2018 prize intended to honor and reward an outstanding contribution to the field of bone, joint and muscle from an established researcher	The European Society for Clinical and Economic Aspects of Osteoporosis, Osteoarthritis and Musculoskeletal Diseases (ESCEO)
2019	K. Czabanowska	Silver Medal for academic achievements	the President of Poland
2020	Nina Bartelink (VHC)	CaRe Award	The Netherlands School of Public Health and Care Research (CaRe)
2020	Dorijn Hertroijs (VHC)	Karolinska Medical Management Centre & EHMA Research Award	Karolinska University Hospital
2022	Hrzic, Roc	Early Career Excellence Award	ASPHER

Research grants

Table 3.1d shows the individual research grants awarded to VHC researchers. In both instances, this concerns a Veni-grant from NWO.

Table 3.1d: Research grants awarded to individuals (2017-2022)

Year	Name	Type of grant
2017	-	-
2018	-	-
2019	Kei Long Cheung	VENI
2020	-	-
2021	Daan Westra	VENI
2022	-	-

Additional to Veni-grants, VHC has also received funding for personals grants, amongst others, through the following programmes:

- PhD China SC Scholarship Programme (1)
- Joint PhD Birmingham/Maastricht University (1)
- Nuffic grants PhD (3)
- SWOL PhD patient decision aid on MS (1)

Invited lectures

VHC researchers are often invited for lectures for local, national and international audiences. Table 3.1e provides a selection of these lectures. They include invitations as keynote speakers at various national and international conferences, as well as invitations to act as content experts during several strategic meetings for regional, national and international stakeholders.

Table 3.1e: Most important invited lectures (2017-2022 top-10)

Year	Name	Which organisation	Name event and lecture workshop
2017	D. Ruwaard	National Conference 'All about Health'. Amersfoort	Lecture "All about Health: End Station or Intermediate Station"
2017	M. Pavlova	Medical University of Varna, June 2017, Varna, Bulgaria. "The role of user charges in European health systems"	Keynote speaker at the Public Health Conference "Public Health - Global Priority for Science and Practice"
2018	Wim Groot	European Health Economic Association	Key note: European Health Economics Association 2018 conference - Key note The role of health economics in public policy from 58 countries
2019	M. Jansen	Regions for Health Network (RHN), European Committee of the Regions, Euregio Meuse-Rhine, 25 th RHN annual meeting.	Keeping People at the Centre of Health and Sustainable Development Policies. Health status of citizens in the EMR
2019	P. Schröder Back	UK Public Health Faculty	Scottish Public Health Ethics Forum. Public health Ethics: a brief review of some useful principles
2022	M. Hiligsmann	WCO-ESCEO-IOF congress	Keynote speaker at the "Health Economics in osteoporosis: which model for which assessment", March 2022
2022	D. Westra	Netwerk Bestuurssecretarissen in de Zorg (BIZ).	'Netwerken, tussen hoop en vrees'
2022	A. Elissen	European Observatory on Health Systems and Policy, Seminar on Primary Care and Skills Mix, September 2022.	Provider networks in primary care.
2022	R. Hrzic	Federal Institute for Demographic Research (Wiesbaden, Germany).	Europeanisation and regional mortality convergence in Eastern Europe. March 29 th 2022.
2022	A. Paulus	Academic Hospital and Maastricht University	March 10, 2022: Invited lecture on cost conscious care through training of health professionals during strategy conference of MUMC+ and extended lecture on this topic on August 26, 2022 also including the role of care networks, see: www.gezonderegio-zon.nl/preuvenemint-event

Memberships of scientific committees, boards, or editorships

Table 3.1f provides an overview of the most important memberships of scientific committees, boards or editorships. The table shows that VHC researchers are involved as chairs and/or members of various national scientific committees (e.g. NWO; ZONMw; Gezondheidsraad; Wetenschappelijke Adviesraad); Advisory Boards (e.g. Zorginstituut Nederland; WHO; Cambridge Public Health Board) and of various associations (NVTAG; VGE). VHC researchers also act as chairs or members of international scientific bodies such as ASPHER, International Osteoporosis Foundation and EUPHA.

Many VHC researchers have also been involved as editorial board member, academic editor, associate editor, (co-)editor or editor in chief of renowned journals, such as: PloS One, International Journal of Care Coordination, Tijdschrift Gezondheidswetenschappen, BMC Health Services Research, Journal of Mental Health Policy and Economics, European Journal of Law and Economics, Osteoporosis International, Archives of Osteoporosis, Aging, Clinical and Experimental Research, Expert Review of Pharmacoeconomics & Outcomes Research, Journal of Medical Economics, Archives of Public Health; Value in Health, Public Health Reviews Journal and Health Care Management Review.

3 Research Quality and Societal Relevance

Table 3.1f: Most important membership's scientific committees, boards, or editorships (2017-2022 top-10)

Year	Name	Which organisation	Which role
2017-current	S. Evers	Netherlands Organisation for Scientific Research (NWO)/ The Netherlands Organisation for Health Research and Development (ZonMw)	Member of the VICI commission
2017-current	D. Ruwaard	The Netherlands Organisation for Health Research and Development (ZonMw)	Chair Committee on Efficiency Research
2017-2020 2020-now	K. Czabanowska	Association of the Schools of Public Health in European Region (ASPHER) University of Cambridge WHO Geneva WHO Europe	President / Chair of the Task Force on the Professionalisation of the Public Health Workforce in the European region ASPHER Member Public Health Advisory Board Member Steering Committee on the Road Map for Professionalisation of the Public Health and Emergency Workforce Advisory Group for the WHO/Europe Country Presence Review
2017-current	M. Hiligsmann	Dutch-Flemish Health Economics Association (VGE) International Osteoporosis Foundation	Board member Member
2017-2019	P. Schröder-Bäck	European Public Health Association (EUPHA)	Member International Scientific Committee, EUPHA President Section "Ethics in Public Health"
2017-2019	C. Dirksen	Nederlandse vereniging voor Technology Assessment in de Gezondheidszorg (NVTAG)	Chair of the board
2017-2022	M. Joore	Dutch Health Care Institute - Zorginstituut Nederland Committee 'Rational Medicines' ZonMW MRC MRP panel (UK) Gezondheidsraad	Member of the Scientific Advisory Board of the Dutch Health Care Institute Member Member Lid Commissie Ethiek en Recht
2019-current	W. Groot	Netherlands Organisation for Scientific Research (NWO)/ The Netherlands Organisation for Health Research and Development (ZonMw)	Chair of the Vidi commission Law and Administration From 2020: Chair of the Vidi commission Linguistics
2019	M. Pavlova	ASPHER working group Economic Evaluation in Healthcare in Europe - EEHE	Chair ASPHER working group EEHE
Since 2020	M. Kimman	Wetenschappelijke Adviesraad	lid Wetenschappelijke Advies Raad -Commissie Geneesmiddelen (WAR) van Zorginstituut Nederland

3.2 Relevance to society

3.2.1 Research products for societal target groups

Besides a significant scientific relevance, VHC also has an important societal relevance.

Public events

Table 3.2a. provides an overview of several public events during which VHC researches participated. They range from public debates, webinars and presentations for the general public to workshops on health economics and HTA for various stakeholders and contributions to strategic policy discussions, both nationally and internationally.

Cohorts based within the Research Line

Prof. S. Evers, prof. M. Joore and emeritus prof. N. Schaper have been involved in the Maastricht Study. The Maastricht Study is a study of diabetes and cardiovascular disease in the South Limburg region and has over 10.000 participants.

Most important societal publications/outputs

Table 3.2b gives an overview of relevant societal outputs of VHC. They range from publications in which society plays a key role to fact sheets, interviews, measurement instruments, tools, impact assessment reports and practical advisory information to different stakeholders in the region, in the Netherlands and in Europe.

Table 3.2a: Public events: lectures/workshops for health care professionals and/or general public/patients (2017- 2022 Top 10)

Year	Name	Public event
2017	D. Ruwaard	Debate 'Publieke positieve gezondheid: in debat over kritische noten' on Nederlands Congres Volksgezondheid 'De professional maakt het verschil', Amersfoort (12 april 2017) , chair
2017	K. Czabanowska	Human Rights in Patient Care , Co-organizer and chair (University of Indiana and ASPHER)
2017-2018	M. Joore/S. Evers	Transferability Course - International Society for Pharmacoeconomics and outcomes research 1 day course on transferability of health economic evidence
2018	T. Clemens	Videoconference on 18.07.2018 with NRW Minister of Health K-J Laumann and Minister-President O Paasch of the German-speaking Community of Belgium on E-health opportunities in the care for Rare Diseases
2017-2019	S. Evers	Societal Cost-Benefit analysis (Maatschappelijke kosten-batenanalyse Strategie en Beleid), Module MPH of NSPOH, Utrecht, The Netherlands
2019	D. Ruwaard	Deelname aan ronde tafeldiscussie met Koning en minister Bruins over "De Juiste Zorg op de Juiste Plek", met centraal aandacht voor twee projecten uit de Academische Werkplaats Duurzame Zorg
2020	Merel Kimman	KNAW webinar: Kwaliteit van leven in coronatijden (16 juni 2020)
2020	A. Paulus/S. Evers	Workshop on Economic Evaluation of healthcare for Municipality of Rotterdam
2022	D. Westra	-Westra: Maastricht UMC+. 'Uitproberen, aanpassen, opbranden? Begrijpen en leren van COVID-19 geleerde aanpassingen door ziekenhuizen en hun effecten op duurzame inzetbaarheid en herstel van zorgprofessionals' (2022, webinar)
2020	Andrea Peeters	Interview in de Volkskrant. Weekend edition 19/20 December 2020 By: Enith Vlooswijk Titel: Coronamedicijn werkt! Of wacht, toch niet. Hé, nu weer wel!

Table 3.2b: Most important societal publications/outputs per year of the research programme (2017-2022, top-10)

Year	Publications/outputs
2017	Drost RMWA, van der Putten IM, Ruwaard D, Evers SMAA, Paulus ATG. Conceptualisations of the societal perspective within economic evaluations: a systematic review. <i>International Journal of Technology Assessment in Health Care</i> 33(2):251-260.
2017	Clemens, Timo; Sorensen, Kristine; Rosenkoetter, Nicole; Michelsen, Kai; Brand, Helmut. The Directorate-General for Health and Consumers 1999-2014: An assessment of its functional capacities. In: <i>Health Policy</i> , Vol. 121, No. 6, 06.2017, p. 594-603.
2018	van der Putten IM, Paulus ATG, Hiligsmann M, Hutubessy RCW, Evers SMAA. Evidence-informed vaccine decision making: The introduction of Human Papilloma Virus (HPV) vaccination in the Netherlands. <i>Health Policy</i> . Mar;123(3):260-266. doi: 10.1016/j.healthpol.2018.09.001. Epub 2018 Sep 7. PubMed PMID: 30219371. Motivation: The article examines the actual use of information from economic evaluation research in the final decision-making. Very little is known about this use. Based on an extensive document study, the role of information in the decision-making process regarding the introduction of the HPV vaccine in the national vaccination programme in the Netherlands was investigated. The results show that not only many different stakeholders are involved in the decision-making process (all of which have different information needs), but also that the same information is sometimes interpreted in different ways. The research also shows that economic information (in particular that resulting from economic evaluations) has played an important role in this decision-making.
2018	Tiliouine, Adam; Kosinska, Monika; Schröder-Bäck, Peter (2018) Tool for mapping governance for health and well-being: the organigraph method. World Health Organisation, Regional Office for Europe. www.euro.who.int/_data/assets/pdf_file/0011/389999/20181218-h1015-toolkit.pdf Motivation: This report was prepared together with and for the WHO.Europe. The co-authors are from the "Governance for Health and Well-being Programme" and here from the "Division of Policy and Governance for Health and Well-being". The report presents the tools of "organigraphs" to map and analyse governance structure in health across different levels (from supra-national to local) and including all sectors. It draws on the results of our TACTICS project. This report supports WHO.Europe and its member states in improving their governance structures. It has already been widely used by WHO.Europe and has a large impact on public health and health care reforms in the WHO.Europe region (particularly in Eastern member states).
2019	Op weg naar een nieuwe bekostiging voor de wijkverpleging. In: <i>Wijkverpleegkundigen hoofdrolspelers bij zorg in de wijk</i> . Utrecht: Nederlandse Zorgautoriteit (NZa), 2019. (https://magazines.nza.nl/standvandezorg/2019/10/index ; https://magazines.nza.nl/standvandezorg/2019/10/op-weg-naar-een-nieuwe-bekostiging-voor-de-wijkverpleging).
2020	Brouwer, G., Westra, D., Spreeuwenberg, M., Kroese, M., Hamelers, N., Ruwaard, D. (2020) Spiegelinformatie lerende organisatie ZIO huisartsenpraktijken (fact-sheet formats)
2020	Smeets RGM, Elissen AMJ, Kroese MEAL, Wissink R, Ruwaard D. Chronische zorg over een andere boeg. <i>De Eerstelijns</i> . 2020. www.de-eerstelijns.nl/2020/06/chronische-zorg-over-een-andere-boeg
2021	Hamelers N, Meesters R, Putrik P, Bosma H, Ruwaard D, Jansen M, Westra D (2021). Regiovergelijker gezondheid en zorgkosten. https://regiovergelijker.maastrichtuniversity.nl Maastricht University 1 december 2021.
2022	Bulck A van den, Metzeltin S, Ruwaard D, Verhoeven GJ, Korte M de, Weij L van der, Witte-Breure T de, Elissen A. De Case-Mix vragenlijst voor wijkverpleging. Een gestandaardiseerd meetinstrument voor de ontwikkeling van cliëntprofielen. Maastricht University 2022 (ISBN: 978-94-6469-186-3).
2022	Sivonen S & Clemens T. (2022) European Health Data Space - Ex-ante analysis of the cross-border effects for the EuregioMeuse-Rhine. IN ITEM 2022 Cross-Border Impact Assessment Report. Maastricht: Maastricht University. https://itemcrossborderportal.maastrichtuniversity.nl/index.html

3 Research Quality and Societal Relevance

3.2.2 Demonstrable use of products by societal groups

Advisory reports

Table 3.2c. gives an overview of how societal groups have used the products created by VHC-researchers. It concerns a representative sample taken from the total societal output of VHC. This output mostly involves advisory reports for a range of national and international stakeholders, organisations and governmental bodies.

Table 3.2c: Advisory reports (2017-2022)

Year	Name	Advisory reports
2018	A. Paulus, S. Evers	Eddy Adang, Niek Stadhouders, Cathleen Parsons, Joost Wammes, Paulien Govaert, Domino Determann, Xander Koolman, Aggie Paulus, Silvia Evers, Geert Frederix, Wija Oortwijn (2018). Verdringseffecten binnen het Nederlandse zorgstelsel. Nijmegen 2018. Rapport in opdracht van het Zorginstituut Nederland (ZiNL)
2018	S. Evers, G. v. Mastrigt	Routinematige inclusie van kosteneffectiviteitsstudies in medische richtlijnen: een standaard aanpak, rapport voor Kennisinstituut Federatie Medisch Specialisten
2018	W. Groot	Brief aan de Tweede Kamer: Winstuitkering door zorgaanbieders (ING adviesraad december 2018)
2019	S. Evers	de Wit GA, van Gils PF, Over EAB, Suijkerbuijk AWM, Lokkerbol J, Smit F, Spit WJ, Evers SMAA, de Kinderen RJA (2019). Maatschappelijke kosten-baten analyse van beleidsmaatregelen om alcoholgebruik te verminderen RIVM Rapport Herzien versie van RIVM rapport 2016-0133. Bilthoven RIVM
2020	M. Joore	Giessen, A. van, Oosterhoff, M., Hoekstra, E., Over, E.A.B., Joore, M.A., Schayck, O.C.P. van, ... Vingerhoeds, M.H. (2020). Gezonder op de basisschool: schoollunches en meer bewegen: een verkenning naar draagvlak, haalbaarheid, betaalbaarheid en impact. Bilthoven: Rijksinstituut voor Volksgezondheid en Milieu (RIVM).
2020	D. Ruwaard	Kennisagenda Zorg op de juiste plek. Editie 2020. Den Haag: VWS, 2020 (https://publicaties.zonmw.nl/fileadmin/zonmw/documenten/Ouderen/JZOJP/Kennisagenda_Zorg_op_de_Juiste_Plek_2020.pdf).
2021	I. van der Putten, I. Kremer, S. Evers	Patel S, van der Putten, I, de Koning R, Kremer I, Evers S, van der Poel A, Boon B. Mini-HTA Innovatie Gehandicaptenzorg: een instrument voor organisaties in de gehandicaptenzorg om de voorwaarden en gevolgen van een innovatie in kaart te brengen. 2021. Vilans/ Academy Het Dorp.
2021	H. Brand, T. Clemens, R. Hrzic & E. Miteniece	European Commission, Directorate-General for Research and Innovation (2021). Study on the use of real-world data (RWD) for research, clinical care, regulatory decision-making, health technology assessment, and policy-making: final report and recommendations, 2021, https://data.europa.eu/doi/10.2777/340449
2021	R. Hrzic, H. Brand	Treatable Mortality in an International Perspective: Feasibility Study for Methodological Improvements https://health.ec.europa.eu/system/files/2021-02/2020_hspa_treatable_mortality_en_0.pdf
2022	Van den Bulck A, Elissen A, Mikkers M, Shestalova V	Eindrapportage Delphi studie. Onderdeel van de impactanalyse van de concentratie van interventies voor patiënten met aangeboren hartafwijkingen. https://open.overheid.nl/documenten/ronl-23c13d0e0a8a78ab88380f227dca30cc32823645/pdf

Collaborative projects

Table 3.2d. displays a selection of collaborative projects implemented with/for professionals, non-scientific organisations, companies or public entities. They include local, regional, national and international collaborative projects.

Table 3.2d: Collaborative projects implemented with/for professionals, non-scientific organisations, companies or public entities (2017-2022 top-10)

Year	Project	Non-scientific partner organisation
2017-now	All About Health (Alles is Gezondheid)	Ministry of Health, Welfare and Sport, Sardes, National Institute for Public Health and the Environment (RIVM), consultancy bureau CommonEye, Netherlands School of Public Administration, lots of regional institutes
2017-now	Blue Care in the Neighborhood (Blauwe Zorg in de wijk)	Health Insurer VGZ, primary care organisation ZIO, Patient organisation Burgerkracht, Municipality Maastricht, Healthcare Information Center for claims data Vektis
2017-2022	Primary Care Plus	Health insurers CZ and VGZ, Patient organisation Burgerkracht, hospitals Maastricht University Medical Center and Zuyderland Medica Center, primary care organisations ZIO, HOZL and MCC Omnes, and the Province of Limburg
2017/ 2020	EMRaDI (Euregio Meuse-Rhine Rare Diseases) (Interreg)	National Alliance of Health Insurance Funds (Belgium), National Union of Socialist Health Insurance Funds (Belgium), Dutch national patient alliance for rare and genetic diseases (VSOP), Allianz Chronischer Seltener Erkrankungen (ACHSE) (DE), AOK Rheinland/Hamburg (DE), CZ (NL), Jessa Ziekenhuis (BE), Mutualités Libres (BE), Rare Diseases Organisation Belgium (RaDiOrg) (BE), Ziekenhuis Oost-Limburg (BE)
2018-2023	Diabetes and health care expenditures	National Institute for Public Health and the Environment (RIVM), Leidsch University Medical Center, University Medical Center Groningen, ISALA Clinics, Health Care Information Center for claims data Vektis, AstraZeneca
2019	Positive health	Province of Maastricht, Patient organisation Burgerkracht, National Institute for Public Health and the Environment (RIVM), lots of organisationorganisation in health care and beyond in Limburg
2019-2022	European guideline education and Cost-Conscious Health care (CoCoCare) funded by Erasmus+	Academic Center of Epileptology Kempenhaeghe Maastricht UMC+, Maastricht University SHE, Kleijnen Systematic Reviews Ltd (UK), Institute of Biomedical Research Sant Pau, Donau University Krems, European Academy of Neurology, Guideline International Network, Scientific Institute for Research and Health Care, European Academy of Neurology, Vereniging voor Arts-Assistenten in Opleiding tot Neuroloog (VAAN), Kennisinstituut Medisch Specialisten
2021-now	Oncozon	OncoZon netwerk, Maastricht UMC+, Zuyderland Medisch Centrum, Laurentius Ziekenhuis, St Jans Gasthuis, VieCuri Medisch Centrum, Maastro Clinic, Catharina Ziekenhuis, Anna Ziekenhuis, Elkerliek Ziekenhuis
Since 2020	Alliantie Sante	Gemeente Maastricht, Zorgverzekeraar VGZ, MUMC+, ZIO, Envida, Burgerkracht Limburg, Levanto, Mondriaan, Xonar, Radar
Since 2020	Covid-19 hospital project	Non-scientific partners: Maastricht UMC+, Zuyderland Medisch Centrum, Laurentius Ziekenhuis, St Jans Gasthuis, VieCuri Medisch Centrum (sinds 2020).

Patents or Spin-offs

Table 3.2e provides a selection of some spin-offs of VHC-research in 2017-2022. They include self-management courses, online self-learning courses, booklets and cost templates.

Table 3.2e. Patents or spin-offs (2017-2022)

Year	Name	Describe patent/spin-off	Title patent/spin-off	Status patent/spin-off
2017	-	-	-	-
2019	S. Evers	Course Self-Management Intervention in epilepsy	ZelfManagement Interventie in epiLEpsie (ZMILE)	Implemented see https://vhc.mumc.maastrichtuniversity.nl/zmile
2019	E. de Bont	Implementation of booklet on childhood fever at Thuisarts.nl	Implementation of booklet on childhood fever at Thuisarts.nl	Implemented online
2020	-	-	-	-
2021	Drost, R; Evers, S; Janssen, L; Paulus, A; Pokhilenko, I; PECUNIA Group.	Reference unit costing templates	PECUNIA reference unit costing templates for criminal justice and education.	Available online: https://zenodo.org/record/4455364#.YQFGCdxCS70
2022	Hiligsmann M, Evers SM, Wiethoff I.	Self-learning online course on Health Technology Assessment. www.maastrichtuniversity.nl/maastrichttheta/self-learning-course		

3 Research Quality and Societal Relevance

3.2.3 Demonstrable marks of recognition by societal groups

Memberships of civil society advisory bodies

Table 3.2f provides an overview of memberships of societal advisory boards and shows that especially senior VHC-researchers participate as chairs and/or members in civil society advisory bodies and working groups, both nationally and internationally.

Table 3.2f: Memberships of civil society advisory bodies (2017-2022, top-10)

Year	Name	Which advisory body	What kind of membership
2017-current	M. Joore	Netherlands Health Care Institute	Member Scientific Advisory - Board
2017	D. Ruwaard	Committee Innovation Health Care Professions & Education (Dutch Health care Institute (ZiN))	Member of the Advisory Board
2017-current	D. Ruwaard	Advisory Board of the National Health care Authority (NZa)	Chair of the Advisory Board
2018-current	D. Ruwaard	Working Group on the role of University Medical Centers in the region (Dutch Federation of University Medical Centers (NFU))	Member of the Working Group
2019	D. Ruwaard	National Knowledge Platform The Right Care in the Right Place (Ministry of health, Welfare and Sport)	Chair Platform
2018-2021	K. Czabanowska	Association of the Schools of Public health in European Region (ASPHER)	President and EB member
2018	W. Groot	VWS/ZoNMW programme TopZorg	Member Supervision Committee
2019	B. Ramaekers	Expert committee (proton therapy)	Expert (Zorginstituut Nederland)
2017-2019	M. Hiligsmann	Committee of Scientific Advisors International Osteoporosis Foundation	Member
2019	M. Pavlova	Advisory Board for the Health Index Ukraine	Member Advisory Board

3.3 Case studies

VHC research is relevant for science, policy and society and is based on many collaborative activities with local, regional, national and international actors. The three selected case studies illustrate this. On the CAPHRI-website a more elaborate description of each case is provided.

Table 3.3.1 Selected case studies

	Case studies	Case selected as it showcases	Exemplifying amongst others
VHC	Better economic evaluations of European health care systems through a standardised methodology: The Pecunia Project	Importance of international collaboration Scientific value of VHC research Development of innovative methodologies	Creation of (methodological) value through exchange of methodological expertise with different partners and countries Value of research in the field of health economics and health technology
VHC	Improved patient care and increased job satisfaction among GPs: The TARGET integrated care programme	Societal value of VHC research Importance of National/Regional collaboration	Improvement in health care through VHC-research that creates societal impact and value The importance of research as part of science-practice-policy partnerships
VHC	"Real World Data helps to improve patient care, decision-making and health policy"	The value of VHC research for policy-making The value of system wide perspectives	How VHC research can support (European) health policy making How VHC research can contribute to achieving sustainable, efficient and equitable health care system

Case study 1: Better economic evaluations of European health care systems through a standardised methodology: The Pecunia Project

The Pecunia project is one of the research projects within a longstanding, innovative research line on intersectoral costs and benefits that has been ongoing since 2011 within the research unit on health economics/HTA and the *Maastricht Health Economics and Technology Assessment* Center (MaastrichtHETA). The project, which took place from 2018-2022, was part of a consortium of ten partners from six European countries, aiming at developing new standardised, harmonised and validated methods and tools for the assessment of costs and outcomes in European health care systems. With the development of innovative methodologies, tools, measurement instruments and compendia for determination of the intersectoral costs and benefits of mental health (prevention) in the educational sector and criminal justice sector, the Maastricht part of the Pecunia project is a showcase of VHC research that created (methodological) value through exchange of methodological expertise with different partners and countries within Europe. Additionally, with two PHD-dissertations, 13 publications in peer-reviewed impact journals and numerous contributions to conferences and meetings, the Maastricht/VHC part of the Pecunia project is also a showcase of VHC-research with a clear scientific value, in this case in the field of health economics and HTA. Besides this, the project is of societal value as well. By highlighting the intersectoral economic impact of mental problems, the results of the Pecunia project are aligned with broader approaches to policymaking, such as Health in All Policies and systems thinking that stress the importance of collaboration across societal sectors to improve population health. Moreover, intersectoral costs and benefits in both sectors are now mentioned in the Cost Guideline of the National Care Institute in the Netherlands (Zorginstituut Nederland).

Case study 2: Improved patient care and increased job satisfaction among GPs: The TARGET integrated care programme

The TARGET movement, that started in 2016 and is ongoing, is an example of a highly innovative and creative project that is well aligned with the theme 'Redesigning Health Care' of the VHC research line. TARGET came about in the context of a strong science-practice-policy partnership. The Dutch regional GP organisation 'Dokter Drenthe' commissioned the project and - based on robust insights flowing from a range of scientific VHC studies - radically innovated in primary care with support from health care insurer Zilveren Kruis. This partnership has resulted in a well-received toolbox of instruments and trainings for primary care professionals to invest in integrated and person-centred care. Accompanied by regulatory innovations (e.g. decrease in registration duties) and financial innovations (e.g. introduction of lump sum) set up by Dokter Drenthe and Zilveren Kruis, TARGET has become an actual movement in the Netherlands with 54 GP practices currently involved. Due

to TARGET, professionals experience more freedom in daily practice to create value for patients and have acquired new skills to take a more person-centred approach to patients. This has resulted into more meaningful interactions with patients - also acknowledged by patients themselves - and an increased work satisfaction for professionals, which clearly proves the societal impact of this VHC project. Besides societal value, TARGET also has scientific value demonstrated by the fact that it has resulted into one PhD-dissertation and four scientific publications. One of these publications, in the renowned scientific journal *the Milbank Quarterly*, gives clear directions and inspiration for the use of realist evaluation. This is a promising but relatively new approach to evaluation in the field of VHC, which has strong benefits for the evaluation and transferability of complex innovations. Besides researchers, also policy-makers and care professionals show much interest in this innovative movement: TARGET was discussed as one of the items in the national news programme 'Radio 1 journaal' last January.

Case study 3: "Real World Data helps to improve patient care, decision-making and health policy"

The work stream on Real-world data is a newly developing research focus within the unit Comparative Health where research places local, national and international developments (such as digitalisation of health data) into system-wide perspective of a European collaboration and integration (the European Strategy for Data, Proposal for a European Health Data Space). The activities within the works stream (in collaboration with partners) have produced two advisory reports to the European Commission and ex-ante assessment report of a legal proposal. The study commissioned by the European Commission on Real-world data use in scientific research, clinical care, regulatory decision-making, health technology assessment and health policymaking concluded that the use of RWD in Europe is still in its infancy. While there are examples of best practices, they represent isolated solutions with limited synergy between them so far. The ex-ante assessment of the European Health Data Space proposal for the Euregional cross-border effects concluded that there is support from the field to address the challenges of data sharing and interoperability. But there has been scepticism about how far existing tailor-made solutions for bilateral data exchange can be scaled to the context of the entire EU. The results of the study for the European Commission on the usage and methodological qualities of the avoidable mortality indicator stated that indicators focused on the avoidable disease burden may better address the policymakers' needs, but that would require tapping into new data sources on disease prevalence and incidence. The different works have provided analysis for both health policy making and provides example of VHC research to contributing the sustainability, efficiency and equity of health care system by supporting (digital) innovation and evaluating the corresponding health policy-making.

4 Collaborations, strategic partnerships and infrastructure

The multidisciplinary nature of VHC offers the opportunity to conduct complementary and collaborative research that can support the development of sustainable health care. For this, collaborative and strategic partnerships have been set-up on a regional/national and eu-regional/international level. Several illustrative examples are described below.

Collaboration and partnerships on a (eu-)regional/national level

To enhance collaboration and partnerships on the regional/national level, the living labs on sustainable health care Limburg and on Public Health Limburg and the Maastricht Health Economics and Technology Assessment Centre play an important role within VHC. In 2017-2022, the **Living Lab on Sustainable Health Care Limburg (AWDZ)**, which was founded in 2013, has developed into an established living lab, both locally, regionally and nationally. The focus is on how to develop and deliver appropriate care, in the right place, by the right person, and for the right price, see www.maastrichtuniversity.nl/onderzoek/academische-werkplaats-duurzame-zorg-limburg. The living lab aims to facilitate policy, practice and teaching with evidence-based knowledge (e.g. on health care management, governance, population health management, health care innovation and digitalisation) for better health, better quality and at lower costs. The living lab has a large network that includes patients, citizens, insurance bodies, governing bodies and knowledge institutes, health care providers and others. The **Living Lab on Public Health Limburg (AWPG)**, which exists for over 15 years (see [Public Health](#)), is a long-term partnership between Southern Limburg municipal public health departments (GGDs), almost 20 municipalities in Zuid-Limburg and the Maastricht UMC+. The main purpose of the academic collaborative centre is to improve cooperation and knowledge transfer between practitioners, policy-makers, researchers and the education sector, ultimately leading to accessible, high-quality evidence-based products, services and facilities in the field of public health and health improvements in the population in this part of the Netherlands. As of 2023, this Living Lab has become part of the Research Line HISP. The **Maastricht Health Economics and Technology Assessment Centre (MaastrichtHETA)** was established in 2022. It unites academics from Maastricht University and the Academic Hospital and includes about 60 researchers (many of which are VHC-researchers) with expertise in the field of health economics and health technology assessment. MaastrichtHETA (www.maastrichtuniversity.nl/maastrichtheta) develops and disseminates innovative methodology and knowledge for advancing, promoting and teaching best practices in health economics and health technology assessment. The research group has a broad and extensive network (with national and international academic centers, private and public partners) leading to close cooperation in research projects. On the local level, VHC researchers also participate and engage in collaborative and strategic alliances as part of the Knowledge Innovation Agenda South

East Limburg (**KIA-ZON**), Limburg Meet (**LIME 2.0**) and the **Maastricht Study**.

Collaboration and partnerships on a European/international level

To foster collaborations that can offer a European/international perspective to public health, its developments and challenges, is the aim of the unit of **Comparative Health**. For this purpose eu-regional, European and international collaborative and strategic alliances have been set up. These encompass collaborations with the Global Network of Academic Public Health Institutions including the American Association of Schools and Programmes of public health in the area of building and supporting the public health workforce. To strengthen this area of research CAPHRI has also endorsed a high stake-holder level work of WHO Global on the professionalisation and development of the public health emergency workforce and CAPHRI researchers participate together with ASPHER (The Association of Schools of Public Health in the European Region) in the steering committee and specific task forces. Furthermore, a collaborative agreement has been established with the Richard Fairbanks School of Public Health Indiana University in the area of Global Public Health Leadership DrPH (doctor of Public Health) programme. Interested graduates of this programme can continue and work on their PhD degree at CAPHRI under the joined supervision of CAPHRI and University of Indiana professors. Other partnerships include *Studio Europa* (Maastricht working on Europe), an interfaculty center of expertise for Europe and related interdisciplinary debate and research. As part of MaastrichtHETA, the ISPOR (International Society for Health Economics and Outcomes Research) student chapter provides a platform to connect with international colleagues in the field of health economics and outcomes research.

Nature and scope of collaboration

Individuals and groups of VHC researchers collaborate in various ways. Several illustrative examples include joint PhD-projects with the Centre for Health and Society of the Heinrich Heine University Düsseldorf and with the University of Birmingham. They also include cooperation with other Research lines within CAPHRI; with other research schools within FHML (including SHE, NUTRIM, GROW), with other faculties at Maastricht University (e.g. SBE; FPN) and with many parties in- and outside of Europe. PhD-projects and other research projects (partly as part of grant applications) have resulted in many publications in which (inter) national academic and non-academic collaboration also becomes visible. Based on the average CNCI score or number of publications in 2017-2020 (with at least 5 or more publications), on a **national level**, these encompass publications with *prominent national non-academic organisations* such as the Trimbos Institute, Netherlands Cancer Institute, Netherlands Institute for Health Services Research and various hospitals (See figure 4.1).

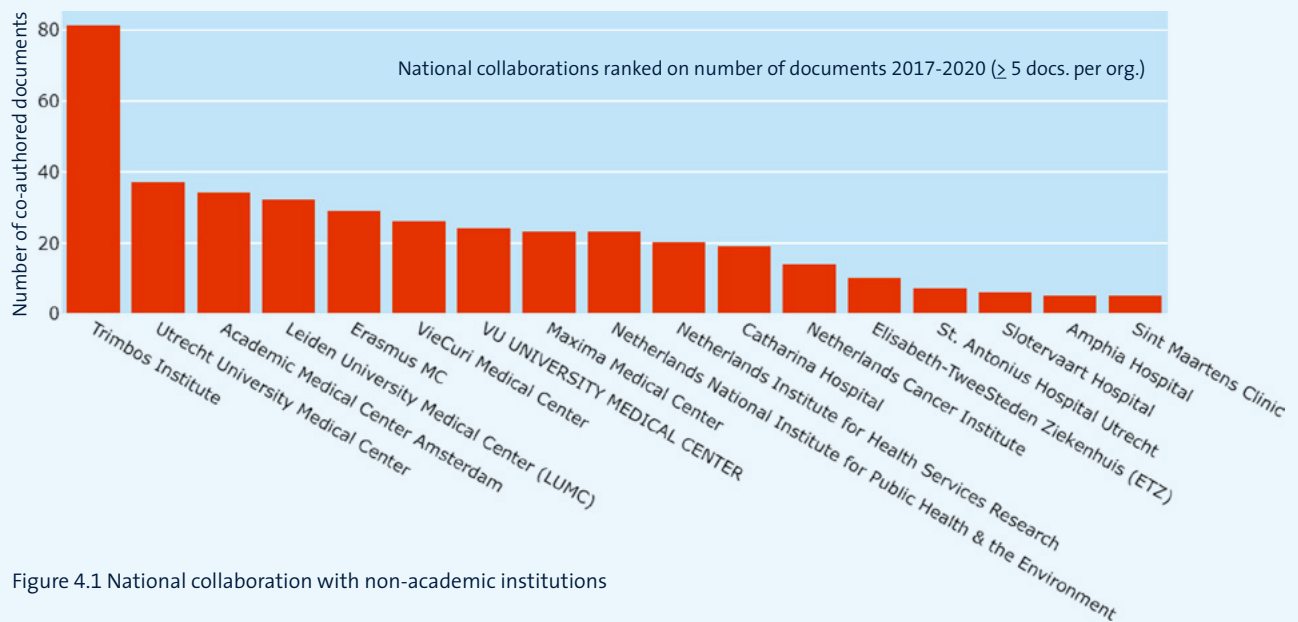


Figure 4.1 National collaboration with non-academic institutions

On a national level, they also encompass publications with *prominent national academic organisations* including all universities in the Netherlands (see figure 4.2).

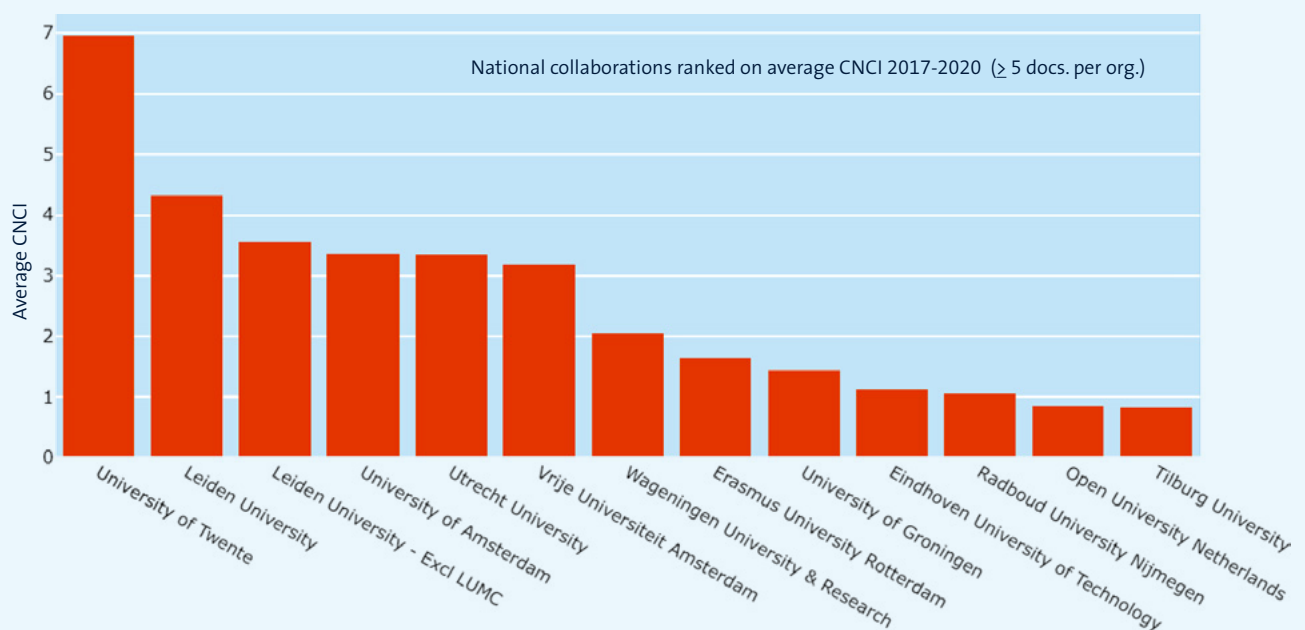


Figure 4.2 National collaboration with academic institutions

On an **international level**, these include publications with *renowned international academic institutions*, such as the University of Cologne, University of London, Vrije Universiteit Brussel, University of Liege, University of Sheffield, University of Oxford, Jagiellonian University, Brunel University, Sorbonne University, University of Cambridge, KU Leuven, Medical University of Vienna, University of Geneva, University of Bremen, London School of Hygiene and Tropical Medicine, King Saud University, National University of Singapore, Karolinska Institute, Udice French Research Universities, Justus Liebig University Giessen, University of Manchester, Free University of Berlin, University of Copenhagen, Lund University, University of

Birmingham, University of Bristol, University of Zurich, University of Edinburgh, Imperial College London and the University of Southampton.

These also include publications with *renowned international non-academic organisations*, such as the World Health Organisation, European Observatory on Health Systems and Policies, Kleijnen Systematic Reviews; HeimHoltz Association, Assistance Publique Hospitiaux Paris, RWTH Aachen University Hospital, University Hospital Leuven, Skane University Hospital, National Institute of Public Health, Harvard Medical School and Institut National de la Santé.

5 Trends, SWOT, strategic plans and viability

5.1 Trends, SWOT and strategic plans

5.1.1 Trends

Several trends are relevant for VHC-research, including those in population health (e.g. demographic changes, migration) and the workforce (e.g. staff shortages, decreasing work population). They also include developments in health care, such as the growing demand for health care and rising costs. The resulting scarcity in financial resources and human resources in health care dramatically sharpens resource constraints and necessitates transformations of health care systems in many countries in order to become sustainable. Creating value by offering better health and better quality at lower costs is key to mediate this scarcity and requires, among others, new ways of organizing, governing, managing and financing health care on a national and international level as well as innovation, preventive actions and digitalisation and the economic evaluation thereof. Against this background, value-based health care as a research area becomes more and more important, often demanding a scientific base for which theoretical constructs and innovative methodologies still need to be developed. Following these trends, the Research Line VHC concentrates on the redesign of health care, the international

comparison of health care systems, on health economics and health technology assessment, and the development of new theoretical constructs and innovative methodologies that enable research on value-based health care. Through this focus and its multidisciplinary nature, VHC research offers the opportunity to conduct complementary and collaborative research that can support the development of sustainable and future-proof health care and optimise related policy- and decision-making. Facilitating policy, practice and teaching with evidence-based knowledge is key to VHC research. This combination ensures that VHC research also benefits society in terms of creating value at a macro, meso and micro levels and balancing societal, organisational and personal values in a reality of scarcity (cf. chapter 1).

5.1.2 The SWOT analysis

Besides informal and self-arranged project meetings, there are, on average, four meetings per year with the entire VHC staff. Besides these, there are the annual CAPHRI meetings for everyone and several strategic CAPHRI meetings for a selected group of researchers. During several of these meetings, a VHC SWOT analysis was made (see Table 5.1).

Table 5.1 SWOT Analysis VHC

Strengths	Weaknesses
<p>Research team</p> <ul style="list-style-type: none"> • Enthusiastic, well skilled staff, with field knowledge, know-how and methodological expertise • Multidisciplinary staff and perspectives, facilitating team science (= in line with FHML/CAPHRI strategy) • Clear and effective meeting and consultation structure within the team and management of research line • Sustainable focus: (pro-active) attention for future developments <p>Deliverables</p> <ul style="list-style-type: none"> • Research results are innovative and well published • Amount of publications, PhDs and earning power • Research with high social/practical relevance (= in line with CAPHRI vision and mission) <p>Networks</p> <ul style="list-style-type: none"> • Embedded in excellent local, regional, national and international networks • Good links to relevant (research) associations • Strong link with policy, practice and education 	<p>Fragmentation and visibility</p> <ul style="list-style-type: none"> • Limited cooperation and communication between different research units/departments within VHC • Not knowing enough about each other's expertise • Financial fragmentation • Low external visibility <p>Human resources</p> <ul style="list-style-type: none"> • Difficulty recruiting qualified staff, also given we cannot always offer good (career) prospects for young research staff. • Imbalance between permanent/temporary staff • High workload • Too few activities for PhDs and postdocs • Imbalance between internal/external PhDs
Opportunities	Threats
<p>Value-based health care, future developments and policy</p> <ul style="list-style-type: none"> • Important stakeholders and funding bodies have value-based health care as a priority topic • Developments in the regions, such as KIA-ZON • Developments in the Netherlands, such as IZA, GALA, WOZO, NFU • International developments: Value-based health care, sustainable health care, innovation and scarcity are emerging research topics and feed the need for research in the field of the RL • Societal impact of research becomes more important and is an essential part of the CAPHRI strategy and CAPHRI's priorities. • Recognition and Rewards (UM strategy) • Starter grants and sector grants (UM/national) <p>Networking and visibility</p> <ul style="list-style-type: none"> • Developments in the Euregion (NL, BE, DE) 	<p>Funding</p> <ul style="list-style-type: none"> • More competition in VHC-like research • Restraints in first money line for research positions/higher dependency on external/soft money • Waning funding opportunities for theoretical and methodological research <p>Human resources</p> <ul style="list-style-type: none"> • Challenges to integrate young academics and offer careers • Retirement of experienced staff members • Competing research, teaching and managerial tasks

5.1.3 Strategic plans

Based on the trends and SWOT analysis, the targets identified for the next five to ten years are:

1 To (further) strengthen internal collaboration and knowledge sharing.

In line with CAPHRI values and strategy, the integration of staff from the three VHC units and the “creating” of one research group is an ongoing process that we support, among others, with regular meetings with staff members. Although collaboration has already improved (e.g. through joined research projects; formal/informal meetings), further actions are needed. In January 2023, we organised a strategic meeting in which we discussed this issue with the VHC staff. Suggestions to (further) increase collaboration included: the creation of a ‘VHC’ (e-)brochure with information on who is who and who does what?; to create a VHC Award for collaboration; to organise more meetings (e.g. ‘matchmakers’; discuss specific funding opportunities; share experiences (e.g. on PhD-supervision)). So far, the enthusiasm of our staff became evident in this process as well as their willingness to work on this strategy together.

2 To (further) increase the external visibility of our work

The SWOT analysis shows that staff members of VHC see many strengths of the RL, including those on the level of the research teams, deliverables and networks. Showcasing these strengths more was suggested by several VHC staff members to increase the external visibility of VHC output. For example, we can make more intense use of social media (e.g. blogs; podcasts); create new websites; increase newsletters and attendance of particular conferences; and participate in important national and international boards and committees. Staff members, however, also indicated that it has to be clear what should be communicated on which level (CAPHRI, RL, research unit, Living Lab, Centre of Expertise). Alignment with the communication strategy that is being developed by CAPHRI is therefore important.

3 To foster and support career opportunities for young researchers

Building on the results of the SWOT analysis, we aim to continuously build career opportunities for young researchers and be attractive for external researchers. This strategy encompasses various substrategies, including:

- Actively making use of available opportunities (sector plans; starter grants; Recognition and Rewards);
- (Where/when possible) Arranging permanent contracts for young researchers, by combining possibilities for potential financial investments. As described in chapter 1, in 2022, for instance, we invested in a position for several young assistant professors who received a permanent contract. They have both a teaching appointment and a research appointment. The research appointment of most of these young talents is limitedly financed by soft money (where possible/

acceptable) from the respective research units and partly by first-line money from CAPHRI. The last was available due to the actual/planned retirement of several VHC researchers. In this way, the RL tries to take risks (to a certain acceptable level) to invest in young academics, always in conference with CAPHRI.

- Binding talents to our RL by actively scouting for talent who already have educational contracts and then complement these with research positions as soon as they are available.
- Continuing to engage with master students in the educational programmes in which VHC staff is involved. We will continue offering them attractive placements from which they can develop further research opportunities within VHC.
- Investing in young talent by offering a fruitful team atmosphere for conducting research and supporting PhD graduates in building their careers within and outside of academia.

Yet, we also have to recognise that opportunities for additional future (permanent) staff are currently scarce, among others, due to the anticipated future funding challenges and the fact that no direct funding research appointments will become available for VHC in the short term.

4 To stimulate funding opportunities

As funding opportunities become more competitive for VHC-like research, another target is to intensify and continue our building of (additional) local, national and international networking to increase the chances for obtaining local, national and international grants.

5 To exploit emerging opportunities

As value-based health care research becomes more and more important in the future, we want to use these opportunities to further shape the vision and research of our RL in the upcoming years.

5.2 Viability

Internal Viability

In the period 2017-2022, the members of the VHC research line have undertaken different actions to stimulate its internal viability. First, during several meetings, researchers have worked on the formulation of a common vision and scope of the research line and on the understanding of 'creating value-based health care'. Second, with the aim of establishing unity, solidarity and internal cohesion, during several meetings per year, members have discussed upcoming opportunities and potential future strategies for VHC, including possibilities for multidisciplinary research, inter-unit research and getting to know each other better (e.g. during matchmaker meetings). Risks and challenges were also part of these discussions. These challenges include the fact that members work at different locations, departments and research units as well as the imbalance between the permanent staff and temporary staff, and between internal and external PhDs. Third, a VHC website was created to increase visibility among peer researchers and stimulate a group spirit and internal coherence. Fourth, as part of the Living Lab on Sustainable Health Care, a PhD programme was set up to guide PhD candidates, among others, on research-related issues (theories, methods, ethics). As part of MaastrichtHETA and the ISPOR student chapter, both a newsletter and monthly meetings have been organised for PhD candidates and VHC staff members. They concern content-related meetings (e.g. to discuss journal articles; presentations by PhD researchers or particular courses) as well as meetings with PhD alumni (to give an idea of career opportunities).

In line with the specific target on staffing for 2017-2022, human resource questions will remain a point of attention within the RL, because of the retirement of a number of senior staff members, including two department heads within the RL. At the same time, there is a growing difficulty to recruit well-qualified new staff. Moreover, many of our colleagues need to continue to balance high teaching loads with research. Six part-time research positions for junior staff (partly on soft money) have been recently created to increase the number of young research talent. Four positions (for assistant professors) have been supported within the department of HSR and two junior staff members within the department of International Health (also see chapter 1). FHML's "Luik 2" resources have gone to three VHC junior researchers to alleviate educational pressure and upgrade research fte.

Raising awareness of and stimulating the application for research grants is another key aspect to support our internal viability, also in the context of waning funding opportunities for theoretical and methodological research. Therefore, we encourage individual VHC researchers to take on advisory functions at national and international research funding bodies and other relevant institutions and to create or join

local, national and international networks that facilitate applications for (inter)national grants.

All these initiatives, together with the quality of our research and research staff, make us confident about the internal viability of our Research Line in the upcoming years.

External Viability

Several actions have been taken to encourage the external viability of VHC. First, the Living Labs on Sustainable Health care and Public Health have served as important anchors for research, funding and viability within the local, regional, and national contexts. Research is more and more linked to the expected future directions of healthcare in the local, regional and national contexts, as expressed in, for instance, the Dutch Integrated Care Agreement (IZA), the Healthy and Active Living Agreement (GALA), the Knowledge Innovation Agenda in the Region (KIA-ZON) and Limburg Meet (Lime 2.0). Second, in 2022, the Maastricht Health Economics and Technology Assessment Centre (MaastrichtHETA) was launched. This Centre unites VHC researchers from Maastricht University and the Maastricht University Medical Center (MUMC+) and develops and disseminates innovative methodology and knowledge for advancing, promoting and teaching best practices in health economics and health technology assessment. As part of MaastrichtHETA, the ISPOR (International Society for Health Economics and Outcomes Research) student chapter provides a platform to connect with colleagues in the field of health economics and outcomes research (HEOR) by organizing various events like workshops, lectures, journal clubs. Third, VHC research is anchored within Euregional and international contexts. To use the unique chance of working in the EU (and thus the European laboratory), several measures for international collaboration (including Interreg funding) have been launched. Fourth, VHC researchers work with patient organisations and professional organisations to support their policies and interventions with tailor-made research. Fifth, besides the VHC website, a Twitter account and LinkedIn profile were created for VHC to increase our visibility to external parties, including funding bodies.

Based on all initiatives, we expect to meet our target to excel in the field of VHC with a strong, coherent and committed research group that has experienced senior PIs, establishes career opportunities for young talent and thus self-supports with both smaller and greater grants, leading to research outcomes that are of high social relevance.



Reaching Syrian immigrants for hepatitis B and C point-of-care testing through municipal registries

Chingy Mousa^{1,2}, Casper den Heijer³, Nicole Dukers-Mulijer^{4,5}, Erik Bruinen⁶, Janis Boufara⁷, Christian Hooger⁸

¹ Department of Global Health, Infectious Diseases and Immunisation Health, Maastricht University, The Netherlands; ² Department of Social Medicine, Care and Public Health Research Institute, Maastricht University, The Netherlands; ³ Department of Health Protection, Care and Public Health Research Institute, Maastricht University, The Netherlands; ⁴ Department of Medical Microbiology, Infectious Diseases and Immunisation Health, Maastricht University, The Netherlands; ⁵ Department of Medical Microbiology, Infectious Diseases and Immunisation Health, Maastricht University, The Netherlands; ⁶ Department of Public Health, Maastricht University, The Netherlands; ⁷ Department of Public Health, Maastricht University, The Netherlands; ⁸ Department of Public Health, Maastricht University, The Netherlands

Background
Chronic hepatitis B virus (HBV) and hepatitis C virus (HCV) infection can lead to potentially fatal cirrhosis and liver cancer¹. Due to their frequent long-term and asymptomatic course, screening of high-risk groups, such as immigrants from endemic areas, is called for². Syrian immigrants are the largest first-generation non-Western immigrant group in South Limburg, with a prevalence above 2% for both hepatitis B and C³.

Methods
In this cross-sectional study, Syrian status holders aged ≥16 years from two Dutch municipalities (Heerlen (n=43) and Maastricht (n=393)) were invited by letter for free HBV (HBsAg) and HCV (anti-HCV) POCT. Two screening days and one catch-up day were organised for each municipality at a regional public health service. The a regional public health service and completed anamnesis questionnaire and test results were analysed descriptively.

Conclusion
• **Summary of findings:** preliminary results of this ongoing study show reasonable participation after a personal invitation by the public health professional of a hard-to-reach immigrant population. However, no infections were identified.
• **Lessons learned:** (cultural) translation and bilingual information at the screening site were indispensable.
• **Recommendation:** Targeted screening through POCT can complement opportunistic screening by facilitating health care for people less likely to be seen in regular care.

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Evaluating the implementation of home-based sexual health care among MSM using the RE-AIM framework; Limburg/Deno

Background
• Testing and treatment can reduce the risk of HIV and hepatitis B, C, and syphilis among men who have sex with men (MSM).
• Home-based testing and treatment (HBT) can reach MSM who do not attend traditional sexual health services.
• HBT can be implemented in a variety of settings, including community-based organizations, primary care, and home visits.

Methods
• We used the RE-AIM framework to evaluate the implementation of HBT among MSM in Limburg/Deno.
• The RE-AIM framework consists of five dimensions: Reach, Effectiveness, Adoption, Implementation, and Maintenance.

Conclusion
• HBT is a promising strategy to reach MSM who do not attend traditional sexual health services.
• The RE-AIM framework is a useful tool to evaluate the implementation of HBT.



Maastricht University



Maastricht UMC+



Maastricht University

Care and Public Health Research Institute

Universiteitssingel 40, 6229 ER Maastricht

P.O. Box 616, 6200 MD Maastricht, The Netherlands

T: +31(0)43 388 2314, E: secretariaat-caphri@maastrichtuniversity.nl

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