Netherlands: The Potentials of Integrating Care via Payment Reforms

35

The Case of Dutch Diabetes Care

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35.1 Integrated Care in the Netherlands

This chapter provides insight in the potential of integrating care through payment reform in the Netherlands. We begin by briefly outlining the main characteristics of the Dutch health care system, which has been transformed into a system of managed competition in the past decade. We focus on health care, because our case study is situated in this setting. We then describe the implementation of the bundled payment for diabetes care as one main example of stimulating nationwide implementation of integrated diabetes care in the Netherlands. This case study is based on our previous work on integrated care and related issues, which we have described in detail elsewhere (de Bakker et al. 2012; de Bruin et al. 2013; Struijs 2013, 2015a, b; Struijs and Baan 2011; Struijs et al. 2010, 2012a, b, 2015a, b; de Jong-van Til et al. 2013; Lemmens et al. 2015; Mohnen et al. 2015).

35.1.1 The Dutch Health Care Reform in 2006: The Introduction of Managed Competition

In the past decades, the Dutch health care system has been gradually transformed into a system of managed competition in which market forces and competition play

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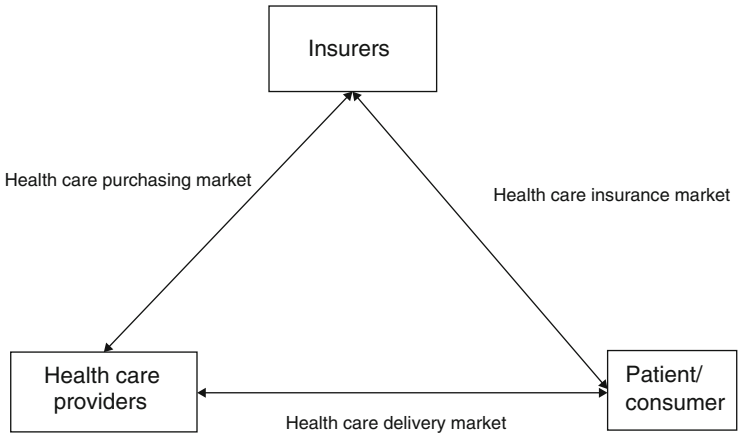

Fig. 35.1 The Dutch health care system and it three interrelated markets. Source: Schäfer et al. (2010)

a prominent role (Van de Ven and Schut 2009). The introduction of managed competition provided a much more prominent role for the three market players in the system, i.e. the patients or consumers, the care providers and the insurance companies. The health care market consists of three interrelated subsidiary markets: the health care provision market, the health care purchasing market and the health insurance market (Fig. 35.1) (Van den Berg et al. 2014).

In the *health insurance market* health insurers provide health insurance policies to all Dutch citizens. Since the introduction of the 2006 Health Insurance Act (Zvw), all health insurers are private companies and allowed to make a profit and pay dividend to shareholders (Schäfer et al. 2010). However, most health insurance companies operate on a non-profit basis. The content of the basic health insurance package to be offered by health insurers is determined by the government. Health insurers can however determine the content (and price) of any additional insurance packages, on which basis they can compete, in addition to the quality of care and the insurance premium. Following the 2006 reform, competition between health insurers led to all insurers incurring losses (Van de Ven and Schut 2009). Under the Zvw, insurers have an obligation to accept all applicants living in the Netherlands or abroad who are compulsorily insured under the Zvw (Van den Berg et al. 2014). To compensate insurers for enrollees with predictably higher care consumption and thereby to prevent risk selection, a risk equalization scheme, which, through the Health Insurance Fund, distributes funds across health insurers on the basis of risk-profiles of enrollees. Residents chose a health insurance policy with the insurer of their choice. They may change their insurer on an annual basis and about 6–8% of enrollees do so.

In the *health provision market* health care providers deliver care services to services users. However, information on quality of care is still hardly available, although some websites, such as Kiesbeter.nl and VolksgezondheidEnZorg.info,

provide basic information to inform consumer choice. The suboptimal information on quality makes it difficult for the care consumer to make an informed choice regarding care providers. Besides GPs and other providers' advice, service users are increasingly using the internet to look for information on care providers and quality of care.

In the *health care purchasing market*, health insurers aim to purchase good-quality services at competitive prices. In reality, purchasing services on the basis of quality remains a challenge, given the scarcity of robust information on care quality as mentioned above (Ruwaard et al. 2014), despite efforts by the government to make quality of care more transparent (Van den Berg et al. 2014). Possibilities for negotiating on the price of care were limited at the start of the 2006 health care reform, but have increased gradually over time. For instance, in 2006 about 7% of hospital care was freely negotiated, while in 2014 this figure was about 70%. For the remaining 30%, prices of hospital care rates are, at present, non-negotiable (Van den Berg et al. 2014). In pharmaceutical care, price negotiations between health insurers and pharmacies were implemented in 2012. Health insurers have restricted the reimbursement of pharmaceuticals to preferred medicines (mostly generics) in case a choice can be made between different brands. The price of GP services is negotiable for a small part only and this is presently limited to multidisciplinary integrated care services [diabetes, chronic obstructive pulmonary disease (COPD) and vascular risk management (VRM)] are being negotiated, as we shall see below. Health insurers may also stimulate competition through selective contracting and substitution of care (e.g. services delivered by a nurse rather than a physician), although this option has not been implemented widely thus far.

35.2 Integrated Care in Practice

35.2.1 Problem Definition

The rising burden of chronic disease has been recognised as a challenge in the Netherlands, with for example about 4% of the population diagnosed with diabetes and this proportion is expected to increase in the next coming decades (Van den Berg et al. 2014; Baan et al. 2009). This poses a major challenge to health services, in particular in combination with the rising prevalence of multi-morbidity, involving complex health care needs vis-a-vis a lack of co-ordination between different components and professional groups within health systems. In addition, there was evidence that the quality of care provided to patients with chronic disease was variable, with patients not receiving all the care they needed.

To address these challenges, the Dutch government initiated a range of policies. These included the introduction of integrated care programmes based on multidisciplinary cooperation in primary care, which sought to improve the effectiveness and quality of care and to ensure affordability. The first integrated care programme focused on diabetes care, based on the principles of a bundled payment, developed by the Netherlands Ministry of Health, Welfare and Sport (de Jong-van Til et al.

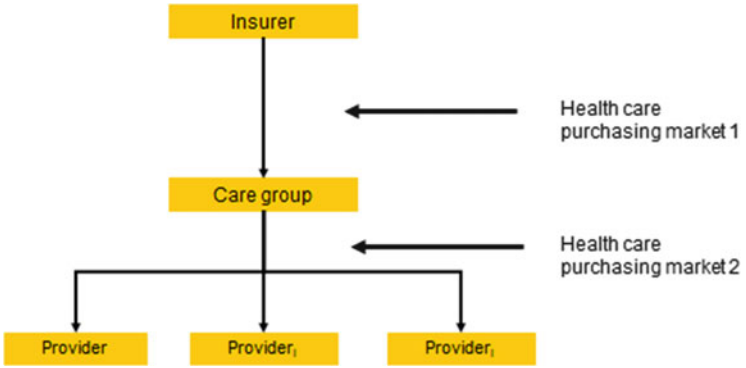

Fig. 35.2 Principle structure of the Dutch bundled payment model. Source: Struijs et al. (2010)

2013). The payment mechanism enables all the necessary services to be contracted as a single package or product. The aim of the new pricing model was to accelerate the implementation of diabetes care programmes, and those for other chronic diseases more widely. In 2007, groups of affiliated health care providers known as care groups began working with bundled payment arrangements for diabetes, initially on an experimental basis. In 2010, bundled payment for the management of diabetes, COPD and VRM was introduced as regular payment mechanism, although contracting under the previous pricing system involving is still permitted. By that year, there were about one hundred care groups operating integrated care programmes for diabetes, covering about 85–90% of all diabetes patients in the Netherlands (Mohnen et al. 2017) (see also Fig. 35.2).

35.2.2 Description of the Bundled Payment Model for Diabetes Care

In the Dutch bundled payment model, insurers pay a bundled payment to a principal contracting entity—the care group—to cover a full range of diabetes-care services for a fixed period of 365 days. The care group, a new legal entity in the Dutch health care system, comprises multiple providers, often exclusively general practitioners (de Jong-van Til et al. 2013). By entering the bundled payment contract, the care group assumes both clinical and financial accountability for all diabetes patients assigned to its care programme. The contract is limited to general diabetes care provided in the primary care setting, that is services to manage the underlying disease and reduce risk for complications, and it does not include services to address complex complications that may arise. General decisions about services covered in the diabetes care bundle were made at a national level and, in 2007, codified in a Health Care Standard for type 2 diabetes (Dutch Diabetes Federation 2007). For the various components of diabetes care, the care group either delivers services itself or subcontracts with other providers (Fig. 35.3). Health insurers and care groups negotiate the price of the bundle, and the care group negotiates with the

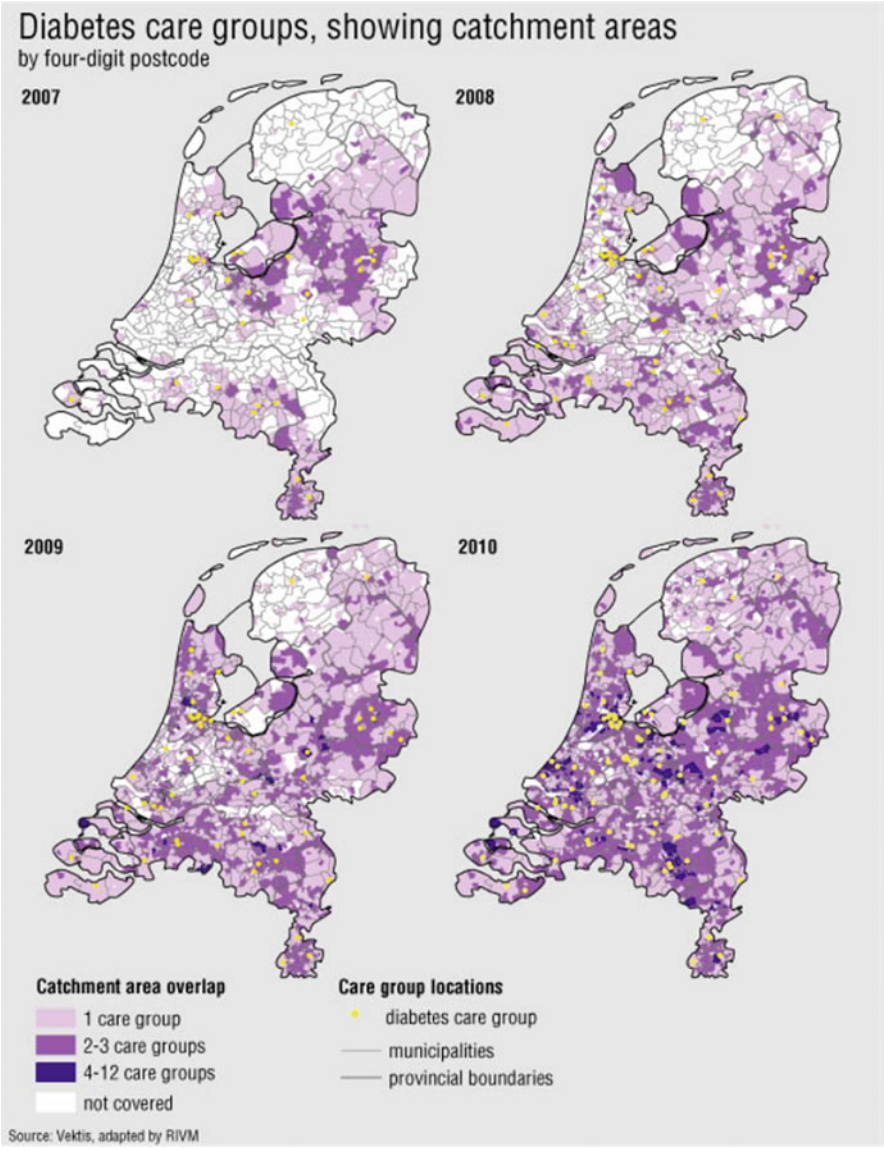

Fig. 35.3 Roll out of bundled payment model for diabetes care during 2007–2010. Source: de Jong-van Til et al. (2013)

subcontracted care providers about fees for specific services. All services are covered under the basic insurance package for all Dutch citizens.

35.2.3 People Involvement/Service User Perspective

At national level, patient associations were actively involved in specifying the minimum requirements for optimal diabetes care. Patient associations agreed on the services described in the Diabetes Federation Health Care Standard (DFHCS), which sets the criteria on quality improvement (Dutch Diabetes Federation 2007).

At regional level, patient involvement is mostly limited to care groups informing and consulting patients. Lemmens et al. (2015), in an assessment of patient involvement strategies employed by nine diabetes care groups, found that information was typically accessed through care groups' websites, brochures or information letters provided upon enrolment into the care programme (Lemmens et al. 2015). They further reported that about half of the care groups also consult with patients through surveys, meeting with patient groups, or implementing patient panels. More direct forms of patient involvement, such as advising, co-producing and (shared) decision-making, do currently not appear to be regularly implemented by care groups. Lemmens et al. (2015) noted that there appears to be an implicit assumption among care groups and patient representatives that patient involvement is an instrument to improve (Raaijmakers et al. 2015) the quality of care and they are therefore committed to collaborate with each other but both parties found it difficult to translate this commitment into practice (Lemmens et al. 2015). At the same time, both groups expressed similar preferences regarding future themes for and shaping of patient involvement in the care group context while there was agreement that several issues such as lack of evidence for effectiveness, differences in viewpoints on the role and responsibilities of care groups and perceived barriers for patient involvement would need to be addressed to take patient involvement to the next level (Lemmens et al. 2015).

35.2.4 Impact

The diabetes care groups were subject to multiple evaluations in terms of assessing the impact of the bundled payment on the health care delivery process, quality of care and medical spending (de Bakker et al. 2012; de Bruin et al. 2013; Struijs 2013, 2015a, b; Struijs and Baan 2011; Struijs et al. 2010, 2012a, b, 2015a, b; de Jong-van Til et al. 2013; Lemmens et al. 2015). These evaluations reported that care providers experienced improvements in the care delivery process due to the introduction of bundled payments and related care groups. Providers specifically mentioned that the coordination among care providers improved, as did protocol adherence, attendance at multidisciplinary consultations, and further training of subcontracted providers to facilitate protocol-driven work processes and the use of the electronic health records. For instance, For instance, a survey of providers in 2010 and 2013 found that, in 2013, some 89% reported that they perceived themselves to be working largely or completely in accordance with the Dutch Diabetes Federation Health Care Standard (DFHCS) compared to 79% in 2010 (Raaijmakers et al. 2015). It was also shown that in 2010, 3 years after bundled

payments had been introduced, 66% of the care groups had implemented web-based electronic health records (EHRs), requiring subcontracted providers to record their data (de Jong-van Til et al. 2013).

Studies further demonstrated that slight to modest improvements in outcome measures, such as percentage of patients with LDL-levels below target levels and percentage of patients with blood pressure levels below target level, were achieved during the first 3 years after the implementation of the bundled payment model (Struijs et al. 2010). In addition, fewer patients were found to have used specialist care that resulted in a reduction in diabetes-related outpatient specialist and inpatient diabetes hospital spending, but overall hospital care spending and consequently per-patient medical spending increased as compared to care as usual after a 2-year follow-up period (Mohnen et al. 2015). The observed increase in spending growth might have been due to the start-up costs of the bundled payment reform. Also, a 2-year follow-up period may have been too short to gauge the full impact of the bundled payment model as quality improvements within primary care tend to take time. Moreover, development and implementation costs were not included in these analyses and such costs can be substantial. For example, Tsiachristas et al. (2014) demonstrated that development costs varied from €5891 to €274,783 while the implementation costs varied from €7278 to €387,879 across integrated care programmes (Tsiachristas et al. 2014). Key cost drivers were the duration of the development phase and the staff needed to develop and implement an integrated care programme. Overall, empirical evidence of the effects of primary care oriented bundled payments models is scarce, and most support is still based on conceptual grounds.

35.2.5 Lessons Learned

The implementation of the Dutch bundled payment model can be seen to have been a success for three key reasons, which can be summarised as follows (Struijs 2015a, b):

1. *The diabetes care standard was codified.* The DFHCS, agreed on by all national provider and patient associations, specifies the minimum requirements for optimal diabetes care and sets the criteria for improvements. By law, the bundled-payment contract must include all services described in the DFHCS, which identifies *what* services to provide but not *who* delivers those services or *where* and *how* they are delivered (as long as these services are in congruence with national guidelines). This provided care groups with an incentive to adopt innovations and to reallocate tasks so that providers each do the work that best matches their qualifications with lowest costs.
2. *It fostered transparency through the use of electronic health records.* The EHR system made patient data available to primary care providers in real time and helped them to reduce duplicated services. Web-based EHRs also enabled care groups to benchmark the performance of care providers, who could then learn

from one another. Struijs et al. (2012a) reported that the EHRs were used to generate accountability reports for insurers and to inform the public about care groups' achievements. This was seen by most providers to provide greater transparency and as the main achievement of the reform (Struijs et al. 2012a).

3. *It optimised the value of clinical expertise*. Being accountable for both cost and quality as a consequence of the bundled payment creates an incentive to offer effective care and prevent the utilisation of unnecessary care. GPs are incentivised to ensure that their patients receive the right type of care, delivered at the right time, at the right facility, by the right provider, and use their clinical knowledge to do so. For instance, Struijs et al. (2012a) found that following the introduction of bundled payments, diabetes patients with no abnormalities on their annual eye exam were switched to a biannual eye-exam schedule, consistent with Dutch clinical-practice guidelines (Struijs et al. 2012a), which increased the profit margins of care groups. Care groups also made use of various forms of task reallocation and task delegation both within primary care, but also from secondary to primary care as they have an incentive to steer to high-quality low-costs providers. For example, insulin-dependent patients without complications are increasingly being treated in GP practices instead of by specialists in hospital settings, which had been the case prior to introduction of the bundled payment.

Although the bundled payment model realised a more intensified and structured collaboration between care providers and demonstrated modest improvements in outcomes in the early stages after implementation, two main challenges remain (de Bakker et al. 2012). First, the care bundle was limited to primary care and included only to some extent specialist care, while medication was excluded from the bundle. Although this limited scope of the bundle was probably advisable in the early stages of implementation, as GPs were being urged to adopt bundles, it potentially encourages then to refer the more-complex (and more costly) patients to specialists (Struijs 2015a, b). As a result, an incentive for all providers to jointly reduce spending on diabetes care is still lacking, since specialists are not incentivised to do so as their payment model has remained unchanged. Moreover, the bundle does not include an incentive for preventing diabetes since the integrated care programme only commences following a diagnosis of diabetes.

Second, the single-disease approach is not in line with the complex health care needs of many diabetes patients with comorbid diseases and this may lead to new forms of fragmentation. Potentially, substantial parts of diabetes patients' health care needs are not related to their diabetes. However, an assessment of health care providers' views on multimorbid conditions found that the disease-specific approach to diabetes management had not yet resulted in problems for diabetes patients with co-morbid conditions (Struijs et al. 2012a).

35.2.6 Outlook

Considering the aforementioned challenges of the bundled payment model with regard to integration across the care pathway and single-disease approach, two new developments, which are currently being implemented in the Netherlands are worth describing further: (i) the integration of primary, secondary and tertiary care for population subgroups, namely a bundled payment for pregnancy and child birth, and (ii) the move towards population health management through the integration of services across the entire care continuum to address the needs of the whole population.

35.2.6.1 Bundled Payment for Pregnancy and Child Birth

Building on the diabetes care reimbursement model, this new bundled payment model seeks to encourage efficient outcome-focused pregnancy and childbirth care, which is currently hindered by the fragmented funding system. Like diabetes care, insurers will pay a single fee to a contracting entity to cover all services during the antenatal, delivery and postnatal phase for each pregnant woman. The contracting entity will be clinically and financially accountable for the services delivered to enrolled population. By eliminating current funding barriers, the Dutch Minister of Health aims to stimulate the collaboration between providers and settings in order to improve patient value. This bundled payment model will be structurally implemented on a voluntary basis in 2017 (Plexus 2016).

35.2.6.2 Population Health Management

Along with the developments in integrated care for single chronic diseases, it became evident that ideally the scope of integrated care needs to be expanded to bridge the gaps not only within the health system, but also between the health and social systems in order to provide truly population-centred services that improve population health (Struijs et al. 2015a; Steenkamer et al. 2017). In the Netherlands, several regional partnerships have emerged in 2013 in which care providers, insurers, and stakeholders such as municipalities and representatives of citizens participate (Drewes et al. 2015). These initiatives are based on a shared vision, following the Triple Aim (Berwick et al. 2008), with substantial investment in developing relationships between the involved actors in order to build trust for aligning organisations' scope and interest. This complex journey towards population health management is currently being evaluated by the Dutch National Institute of Public Health and the Environment. This evaluation will provide insight in the facilitators and barriers for implementing population health management in order to realize improvements in population health, quality of care and reduce spending growth.

Both the development of population health management and the implementation bundled payment for birth care are strong examples of 'integrating care' along and across the different domains, while at the same time revealing new but comparable challenges. First, both developments will need to create governance arrangements in order to achieve their aims. Whereas the bundled payment requires a contracting

entity, this might not be the case within the population health management initiatives. How to best arrange these new governance arrangements, including public-private partnerships, which need to include elements of accountability, oversight and distributed leadership, while at the same time considering the national, regional and local context, is still widely discussed and yet to be resolved (Goodwin et al. 2014). These discussions also bring to the forefront conflicting interests of existing organisations and providers and the overall system-level goal of reducing spending growth.

Second, in both developments questions arise about how to engage the population they serve. In population management initiatives, various strategies to actively involve the local community have already been launched, such as online 'communities', patient representatives as board members of health services, and even new entities led by citizens, which serve as integrator as described by Berwick et al. (2008). These tools and the definitions of underlying concepts vary considerably in scale and scope and more insight is needed to ascertain what works for whom in what context to successfully involve the community (Goodwin et al. 2014; Ferrer, forthcoming).

Thirdly, there is an ongoing debate about the appropriate payment models. Although for birth care a choice has already been made towards a bundled payment approach, involved providers are hesitant to adopt such a disruptive payment model (Struijs et al. 2016). Furthermore, discussions remain regarding the scope of the bundle and the number of modules within the bundle. Moreover, there is still debate within this field whether this is really a stimulus for integrated care or even a threat (Struijs et al. 2016). Currently, empirical evidence underpinning the effects of bundled payments on outcomes is scarce and its support is mostly on conceptual grounds. With the population health management development, the debate on payment models is even more complex (Struijs et al. 2015b). By looking at initiatives experimenting with alternative payment models such as shared savings models (Hayen et al. 2015; Song et al. 2011, 2012; Chernew et al. 2011), lessons can be learned on how to shift financial and clinical accountability from payers towards (groups of) care providers (and potentially in the near future also citizens) in order to incentivize these providers to improve population health, quality of care and reduce costs growth.

References

Baan, C. A., van Baal, P. H., Jacobs-van der Bruggen, M. A., Verkley, H., Poos, M. J., & Hoogenveen, R. T., et al. (2009). [Diabetes mellitus in the Netherlands: Estimate of the current disease burden and prognosis for 2025]. *Nederlands Tijdschrift voor Geneeskunde, 153*(22), 1052–1058.

Berwick, D. M., Nolan, T. W., & Whittington, J. (2008). The triple aim: Care, health, and cost. *Health Affairs (Project Hope), 27*(3), 759–769.

Chernew, M. E., Mechanic, R. E., Landon, B. E., & Safran, D. G. (2011). Private-payer innovation in Massachusetts: The 'alternative quality contract'. *Health Affairs (Millwood), 30*(1), 51–61.

de Bakker, D. H., Struijs, J. N., Baan, C. B., Raams, J., de Wildt, J. E., Vrijhoef, H. J., et al. (2012). Early results from adoption of bundled payment for diabetes care in the Netherlands show improvement in care coordination. *Health affairs (Project Hope), 31*(2), 426–433.

de Bruin, S. R., van Oostrom, S. H., Drewes, H. W., de Jong-van Til, J. T., Baan, C. A., & Struijs, J. N. (2013). Quality of diabetes care in Dutch care groups: No differences between diabetes patients with and without co-morbidity. *International Journal of Integrated Care, 13*, e057.

de Jong-van Til, J. T., Lemmens, L. C., Baan, C. A., Struijs, J. N. (2013). *The organization of care groups in 2011. Current State of affairs and developments during last years* [in Dutch] (Report No.: 260131003/2012). Bilthoven: National Institute for Public Health and the Environment (RIVM).

Drewes, H. W., Heijink, R., Struijs, J. N., & Baan, C. A. (2015). *Working together towards sustainable care*. Bilthoven: National Insitute for Public Health and the Environment (RIVM).

Dutch Diabetes Federation. (2007). *Health Care Standard. Transparency and quality of diabetes health care for patients with diabetes type 2*. Dutch Diabetes Federation: Amersfoort.

Ferrer, L. *Development of the Domain 'People'*. Working paper for the WHO Regional Office for Europe, Copenhagen (forthcoming).

Goodwin, N., Sonola, L., Thiel, V., & Kodner, D. (2014). *Co-ordinated care for people with complex chronic conditions*. Key lessons and markers for success.

Hayen, A. P., van den Berg, M. J., Meijboom, B. R., Struijs, J. N., & Westert, G. P. (2015). Incorporating shared savings programs into primary care: From theory to practice. *BMC Health Services Research, 15*, 580.

Lemmens, L. C., de Bruin, S. R., Struijs, J. N., Rijken, M., Nijpels, G., & Baan, C. A. (2015). Patient involvement in diabetes care: Experiences in nine diabetes care groups. *International Journal of Integrated Care, 15*, e044.

Mohnen, S. M., Baan, C. A., & Struijs, J. N. (2015). The impact of bundled payments for diabetes care on curative health care costs growth. A 2-year follow-up study based on Dutch nationwide health claims data. *American Journal of Accountable Care*, *12*, 60–63.

Mohnen, S. M., Molema, C. C., Steenbeek, W., van den Berg, M. J., de Bruin, S. R., Baan, C. A., et al. (2017). Cost Variation in Diabetes Care across Dutch Care Groups? *Health Services Research, 52*, 93–112.

Plexus, K. (2016). *Advice bundled payment for pregnancy and child birth*. KMPG: Amstelveen.

Raaijmakers, L. G., Kremers, S. P., Schaper, N. C., de Weerdt, I., Martens, M. K., Hesselink, A. E., et al. (2015). The implementation of national action program diabetes in the Netherlands: Lessons learned. *BMC Health Services Research, 15*, 217.

Ruwaard, S., Douven, R., Struijs, J., & Polder, J. (2014). Hoe kopen zorgverzekeraars in bij ziekenhuizen. Een analyse van de contracten tussen verzekeraars en ziekenhuizen. *TPEdigitaal, 8*(2), 98–117.

Schäfer, W., Kroneman, M., Boerma, W., van den Berg, M., Westert, G., Devillé, W., & van Ginneken, E. (2010). The Netherlands: Health system review. *Health Systems in Transition, 12*, 1–229.

Song, Z., Safran, D. G., Landon, B. E., He, Y., Ellis, R. P., Mechanic, R. E., et al. (2011). Health care spending and quality in year 1 of the alternative quality contract. *The New England Journal of Medicine, 365*(10), 909–918.

Song, Z., Safran, D. G., Landon, B. E., Landrum, M. B., He, Y., Mechanic, R. E., et al. (2012). The 'Alternative Quality Contract,' based on a global budget, lowered medical spending and improved quality. *Health Affairs (Project Hope), 31*(8), 1885–1894.

Steenkamer, B. M., Drewes, H. W., Heijink, R., Baan, C. A., & Struijs, J. N. (2017). Defining population health management. A scoping review of the literature. *Population Health Management, 20*, 74–85.

Struijs, J. N. (2013). Payment reform and integrated care: The need for evaluation. *International Journal of Integrated Care, 13*, e056.

Struijs, J. N. (2015a). How Dutch Health care Bundled payments are working in the Netherlands. *New England Journal of Medicine Insight Center*.

Struijs, J. N. (2015b). How health care bundled payments are working in the Netherlands. *Harvard Business Review*.

Struijs, J. N., & Baan, C. A. (2011). Integrating care through bundled payments—lessons from The Netherlands. *The New England Journal of Medicine, 364*(11), 990–991.

Struijs, J. N., van Til, J. T., & Baan, C. A. (2010). *Experimenting with a bundled payment system for diabetes care in the Netherlands: The first tangible effects* (Contract No.: 260224002). Bilthoven: National Institut for Public Health and the Environment (RIVM).

Struijs, J. N., de Jong-van Til, J. T., Lemmens, L. C., Drewes, H. W., de Bruin, S. R., & Baan, C. A. (2012a). *Three years of bundled payment for diabetes care in the Netherlands: Impact on health care delivery process and the quality of care* (RIVM rapport 260013002). Bilthoven: Rijksinstituut voor Volksgezondheid en Milieu.

Struijs, J. N., Mohnen, S. M., Molema, C. C. M., De Jong-van Til, J. T., & Baan, C. A. (2012b). *Effects of bundled payment on curative health care costs in the Netherlands. An analysis for diabetes care and vascular risk management based on nationwide claim data, 2007–2010* (Report No.: RIVM rapport 270551008). Bilthoven: Rijksinstituut voor Volksgezondheid en Milieu.

Struijs, J. N., Drewes, H. W., Heijink, R., & Baan, C. A. (2015a). How to evaluate population management? Transforming the Care Continuum Alliance population health guide toward a broadly applicable analytical framework. *Health Policy, 119*(4), 522–529.

Struijs, J. N., Drewes, H. W., & Stein, K. V. (2015b). Beyond integrated care. Challenges on the way towards population health management. *International Jouranal of Integrated Care, 15*(4).

Struijs, J. N., Heijink, R., Kooistra, M., & Baan, C. A. (2016). *Toward bundled payments of birth care* (Report No.: 2016-0031). Bilthoven: National Institute for Public Health and the Environment (RIVM).

Tsiachristas, A., Waters, B. H., Adams, S. A., Bal, R., & Molken, M. P. (2014). Identifying and explaining the variability in development and implementation costs of disease management programs in the Netherlands. *BMC Health Services Research, 14*, 518.

Van de Ven, W. P., & Schut, F. T. (2009). Managed competition in the Netherlands: Still work-in-progress. *Health Economics, 18*(3), 253–255.

Van den Berg, M. J., De Boer, D., Gijsen, R., Heijink, R., Limburg, L. C. M., & SLN, Z. (2014). *Zorgbalans 2014. De prestaties van de Nederlandse gezondheidszorg*. Bilthoven: RIVM.