Home Care by Self-Governing Nursing Teams: The Netherlands’ Buurtzorg Model

Bradford H. Gray, Dana O. Sarnak, and Jako S. Burgers

Abstract  The Dutch home-care provider Buurtzorg Nederland has attracted widespread interest for its innovative use of self-governing nurse teams. Rather than relying on different types of personnel to provide individual services—the approach taken by most home health providers—Buurtzorg expects its nurses to deliver the full range of medical and support services to clients. Buurtzorg has earned high patient and employee ratings and appears to provide high-quality home care at lower cost than other organizations. This case study reviews Buurtzorg’s approach and performance thus far and considers how this model of care might be adapted for the United States.

BACKGROUND
Buurtzorg Nederland, a nonprofit Dutch home-care organization, has garnered international attention for delivering high-quality care at lower cost than most competing organizations through the deployment of self-governing nurse teams. When they go into a patient’s home, Buurtzorg’s nurses provide not only medical services that require nursing training but also many support services that lesser-trained (and cheaper) personnel usually provide in other home-care organizations.

By many measures, Buurtzorg Nederland has been an extraordinary success. Starting with one team in 2007 in the small city of Almelo, Buurtzorg (Dutch for “neighborhood care”) has grown into a national organization that by 2015 employed 8,000 nurses in 700 teams. These nurses cared for 65,000 patients in 2014.1 Early efforts are under way in several countries, including Japan, Norway, Sweden, the United Kingdom, and the United States, to adapt the Buurtzorg approach to local circumstances, and many other Dutch home-care organizations have begun adopting aspects of the Buurtzorg model. According to Sharda S. Nandram, a Dutch management professor, Buurtzorg has created a new management approach—“integrating simplification,” characterized by a simple, flat organizational structure through which a wide range of services, facilitated by information technology, can be provided.2

Government surveys have repeatedly shown that Buurtzorg’s patients are highly satisfied. Moreover, surveys of employees over several years indicate the organization has the most satisfied workforce of any Dutch company with more than 1,000 employees.3 The model also appears to achieve savings. In the
Netherlands, insurers pay for home care on an hourly basis, and Buurtzorg’s teams of nurses have used fewer hours to meet patients’ needs than have other organizations.

As Buurtzorg has grown, however, so too have suspicions that this success is at least partly based on cherry-picking the most profitable patients. In response, the Dutch Ministry of Health, Welfare, and Sport commissioned the consulting firm KPMG to conduct a study comparing Buurtzorg to other home-care providers, controlling for differences in patient characteristics. The results, published in January 2015, offer the best available evidence of Buurtzorg’s performance on measures of cost. They show that Buurtzorg is indeed a low-cost provider of home-care services, and that this effectiveness is not attributable to its patient mix. However, when patients’ nursing home, physician, and hospital costs were added to the analysis, Buurtzorg’s total per-patient costs were about average for the Netherlands.

Our examination of the Buurtzorg approach and its possible applicability to the United States is based on published information and on telephone and in-person interviews conducted in February and March 2015 with Buurtzorg’s CEO, colleagues, and members of a Buurtzorg nursing team. Additional interviews obtained perspectives from Dutch government officials and insurers, the nation’s leading patient advocacy organization, a competing home-care provider, the Dutch primary care physician association and home-care trade association, the principal investigator at KPMG, and people involved in the early effort to implement a Buurtzorg program in Minnesota. (For a complete list of individuals interviewed, see Appendix A.)

**BUURTZORG CARE MODEL**

Home care in the Netherlands is provided to patients needing temporary services following hospital discharge, patients with chronic conditions requiring medical services, people with dementia, and individuals in need of end-of-life care. Home-care organizations contract with government-funded insurance companies to provide 10 different home-care services. The number of authorized hours is based on individual patient assessments.

Some home-care services require nursing expertise, but many others, such as help with activities of daily living (e.g., dressing, bathing, or toileting), can be provided by less trained, less expensive personnel. Home-care organizations typically have deployed nurses to provide only those services that require their knowledge and skill, while sending less costly personnel to perform other services. With various caregivers coming at different times on different days to provide services, such an approach can jeopardize continuity of care. By several accounts, both patients and nurses were often dissatisfied with the traditional home-care model.

Buurtzorg has taken a radically different approach, reflecting the vision of its CEO and cofounder, Jos de Blok, an experienced home-care nurse with management training. The goals of the model are to bring a holistic, neighborhood-based approach to the provision of services; maximize patients’ independence through training in self-care and creation of networks of neighborhood resources; and rely on the professionalism of nurses (Exhibit 1). One of de Blok’s oft-stated mottos is “humanity over bureaucracy.”

The care model that grew out of these ideas gives self-governing teams of 10 to 12 highly trained nurses responsibility for the home care of 50 to 60 patients in a given neighborhood. The teams work with the patients and their families, primary care providers, and community resources to meet patients’ needs and help them maintain or regain their independence.
Buurtzorg nurses are responsible for the entire range of home-care services: assessing patients’ needs, developing and implementing care plans, providing services or scheduling medical visits as needed, and generating the documentation needed to facilitate continuous care and billing. Buurtzorg collects information about patients’ satisfaction at the completion of the course of care (in addition to the patient surveys carried out by the health ministry). A modern information technology (IT) system and intranet enable online scheduling, documentation of nursing assessments and services, and billing as well as the sharing of information within and across teams.\textsuperscript{10}

Coaches—not managers—are available to solve problems.\textsuperscript{11} There were 15 coaches for the 700 teams in early 2015. Arend Jan Zwart, a Buurtzorg coach, said that more of his work pertains to helping teams function than to providing advice about patient care.\textsuperscript{12} Nurses do not report to managers, though their work hours are tracked.\textsuperscript{13} The small back office (with fewer than 50 people in early 2015) carries out functions such as salary administration, contracting for teams’ offices, and financial administration. Under a union agreement, the nurses are paid according to their education level, with a standard annual increase and bonuses based on years working for Buurtzorg.\textsuperscript{14} Surplus revenues are used for continuing education of nurses, team projects to improve community health, and organizational innovations.\textsuperscript{15}

The use of self-regulating teams provides flexibility in work arrangements to meet both nurses’ and patients’ needs. For example, the six nurses in a team we visited in Haaksbergen, a Dutch town of about 19,000 people a few miles from Almelo, work 16 to 24 hours per week (though 32 hours is said to be more typical). Two nurses share responsibility for six to eight patients at a given time, making visits mostly in the mornings and evenings. Every other week, the team meets to review patients’ cases and discuss problems. It shares a small two-office building with another six-person team from which it had amicably split. Two other Buurtzorg teams, one of which specializes in dementia patients, work in the community.

**BUURTZORG’S PERFORMANCE**

Buurtzorg’s rapid growth appears to be rooted in several factors. First, the model of care is popular among nurses with home-care experience, enabling recruitment of talented staff.\textsuperscript{16} Second, the high patient and family satisfaction ratings (see Appendix B) and good health outcomes have helped teams obtain referrals from physicians and hospitals as well as word-of-mouth recommendations. In addition, a 2009 Ernst and Young study found that Buurtzorg—then a much smaller organization—was able to meet patients’ needs while using 40 percent of the authorized patient care hours, compared

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**Exhibit 1. Buurtzorg Care Model: Goals and Structure**

<table>
<thead>
<tr>
<th>Goals</th>
<th>Structure</th>
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<tbody>
<tr>
<td>Create self-governing teams of nurses to provide both medical and supportive home care services</td>
<td>Independent teams (with a maximum of 12 nurses) take responsibility for all aspects of care for 50–60 patients</td>
</tr>
<tr>
<td>Become a sustainable, holistic model of community care</td>
<td>Relies on IT system for online scheduling, documentation of nursing assessments and services, and billing</td>
</tr>
<tr>
<td>Maintain or regain patients’ independence</td>
<td>Coaches are available to problem-solve for each team</td>
</tr>
<tr>
<td>Train patients and families in self-care</td>
<td>Small back office handles administration</td>
</tr>
<tr>
<td>Create networks of neighborhood resources</td>
<td>(How do you manage professionals? You don’t!)</td>
</tr>
<tr>
<td>Rely on the professionalism of nurses</td>
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with the average among other home-care organizations of about 70 percent. The study also found that Buurtzorg’s patients required care for less time, regained autonomy quicker, had fewer emergency hospital admissions, and shorter lengths-of-stay after admission. In addition, the company had lower overhead costs than other home-care providers (8% of total costs, compared with 25%) and less than half the average incidence of sick leave and employee turnover.\textsuperscript{17}

De Blok himself became a visible and effective advocate for the company in policy circles and popular media. In addition to touting Buurtzorg’s high levels of patient and nurse satisfaction, he could point to evidence that its nurses were able to meet patients’ needs in fewer hours than other home-care organizations—leading to better care at lower cost.\textsuperscript{18} This claim helped drive the organization’s growth and earned it government support.\textsuperscript{19}

**Criticisms of the Buurtzorg Model**

Buurtzorg’s rapid growth was accompanied by criticism from some quarters, particularly competitors. In interviews, detractors claimed that Buurtzorg patients needing unplanned care sometimes had to seek help from other home-care organizations or hospital emergency departments. In addition, Buurtzorg teams, according to other critics, selected complex patients with multiple needs—meaning more billable hours per home visit and less time spent on travel, which is not reimbursed.\textsuperscript{20}

We did not find evidence to substantiate either claim. Regarding the first, de Blok argues that effective home care minimizes the need for unplanned care, and that only rarely have other home-care organizations been called on to help care for Buurtzorg patients (as his teams have sometimes done for other groups). We did not learn of any physician or patient complaints about Buurtzorg’s teams being unresponsive to patients’ needs for unplanned care; moreover, it is difficult to see how an unresponsive organization could achieve Buurtzorg’s high patient satisfaction ratings.\textsuperscript{21}

As for the claim that Buurtzorg teams select complex patients to maximize revenue, de Blok notes that Buurtzorg’s patient mix reflects referrals from physicians—many of whom are aware of Buurtzorg’s success and thus more likely to refer their complex patients to the organization, a point borne out in a 2009 study.\textsuperscript{22} He also notes that average patient visits by Buurtzorg nurses last 25 minutes, comparable with the average for competing home-care providers. It is also difficult to square the allegation with the finding that Buurtzorg’s patients receive care for less time.

**Latest Research**

Buurtzorg’s increasing prominence and criticisms about cherry-picking led the Dutch Ministry of Health, Welfare, and Sport to commission the consulting firm KPMG to compare Buurtzorg’s performance with that of peer organizations. Published in January 2015, the study found that Buurtzorg ranked among the best home-care agencies in the country on measures of patient-reported experiences, while providing substantially fewer hours of care than the average home-care organization (108 hours vs. 168 hours per patient year) (Exhibit 2).\textsuperscript{23} Its case-mix adjusted costs were relatively low (at the 38th percentile, meaning that 62 percent of home-care providers were more expensive), even though its personnel costs per hour were substantially higher than average (€54.47 vs. €48.74 [59.24 vs. $53.00]). The case-mix adjustments in the data analysis were aimed at minimizing the possibility that cost differences were the result of patient selection either by Buurtzorg or other providers.\textsuperscript{24}

KPMG extended this analysis by looking at the nursing home and “curative” (physician and hospital) costs for home-care patients. Compared with the average home-care organization, Buurtzorg
patients were less likely to go into nursing homes but subsequent costs for curative care were higher (at the 91st percentile of home-care organizations). When all of these costs were included, Buurtzorg’s case-mix adjusted total costs per client were just below the national average (49th percentile).

The KPMG report did not speculate on the reason for low nursing home costs and high curative care costs, calling it a question for follow-up research. The findings appear contradictory, because the former is suggestive of good home care while the latter may not be. Yet the nurses’ high level of credentialing, the growth of referrals to Buurtzorg teams, and the organization’s high satisfaction rates suggest that Buurtzorg delivers high-quality care. Perhaps highly trained nurses are particularly likely to spot problems requiring a physician’s attention.

It is also possible, however, that Buurtzorg’s patient population—the composition of which is heavily influenced by physicians’ referral practices—may include a disproportionate share of patients on a downward health trajectory (owing to Alzheimer’s disease, for example) compared with patients requiring short-term care following hospital discharge. If true, this would explain the higher curative costs. Unfortunately, although KPMG’s analysis adjusted for case mix, it did not describe how Buurtzorg’s patient mix compared with that of other Dutch home-care providers.

In sum, the KPMG study concludes that Buurtzorg’s highly satisfied, self-managing teams of nurses provide low-cost home care that is both efficient (fewer hours per patient) and of high quality (as measured by patient satisfaction), but at a total cost—including nursing home, physician, and hospital costs—that is about average for Dutch home-care providers.

### APPlicability to the United States

In the United States, an effort to create a home-care organization modeled on Buurtzorg began in 2014 in Stillwater, Minnesota, with financial support and guidance from Buurtzorg Nederland. By early 2015, Buurtzorg USA had become a legally constituted nonprofit organization with a rudimentary administrative structure and a Minnesota Comprehensive Home Care License. The new organization had four nurse employees and a contract with a Humana subsidiary to provide care coordination services, and had cared for its first few home-care clients on a private-pay basis. Efforts were under way to raise awareness of Buurtzorg as a home-care provider among local health care and social service organizations, establish eligibility to bill Medicare and Medicaid, and adapt Buurtzorg Nederland’s information technology system for use in the U.S.
Buurtzorg USA faces several challenges, including the need to develop a referral network since it does not have a built-in source of referrals, as might a subsidiary of a hospital system. According to the organization’s director, Michelle Michels, efforts to build awareness through outreach to churches and social services organizations are beginning to pay off. Michels is optimistic that Buurtzorg USA can attract patients and build a workforce of nurses to provide the full range of in-home services.

The major challenge the organization faces is the need to deal with multiple payers, each with its own payment rules and procedures. This will make it difficult for nurses to follow the approach of the Dutch Buurtzorg nurses, who do their own billing. It took the Dutch Buurtzorg several years to negotiate a flat per-hour payment method for its services; doing so in the U.S. would require both Medicaid and Medicare waivers.

Surmounting such challenges may have been less daunting if Buurtzorg USA were part of another organization, such as a health system or visiting nurse service. But De Blok chose to create his organization from the ground up, rather than trying to change the culture of an existing organization. He says, however, that spreading Buurtzorg through a franchising approach may also be feasible.

**BUURTZORG’S FUTURE**

Buurtzorg Nederland achieved success within a particular policy environment and marketplace. It will certainly face new competitive challenges as other providers adopt elements of its model. The payment environment may also become more difficult: in 2015, cost-containment pressures led the Dutch government to change the payment system for home care, putting the insurance companies through which government funds flow at financial risk for the costs of home care. Buurtzorg would be disadvantaged, for example, if insurance companies were to base their contracts on per-hour rather than per-case costs.

Buurtzorg’s ability to adapt to such changes will be an important test of the model’s resilience. Growth itself may also provide challenges, if the number of Buurtzorg teams continues to increase at a much faster rate than the headquarters office that provides administrative support. And organizations created by a charismatic leader eventually face difficult questions of sustainability and transition.

Beyond its growth in home care in the Netherlands and abroad, the Buurtzorg self-management model is being tried in different kinds of organizations, particularly those in which staff morale is a chronic issue, such as long-term care facilities.

Ultimately, the importance of Buurtzorg may lie not just in the wholesale spread of this model but in the recognition of the value of its key components. These include the colocation of health professionals in neighborhood settings and the provision of comprehensive and coordinated care. Perhaps most important, however, is the use of self-managed teams. With their potential to bring joy to work, autonomous work teams may offer an antidote to the growing problem of burnout among health professionals.
NOTES

1 Interview with Jos de Blok, February 18, 2015. He provided additional information via email.

2 S. S. Nandram, Organizational Innovation by Integrating Simplification: Learning from Buurtzorg Nederland (Cham, Switzerland: Springer, 2014).

3 The employee surveys are conducted by Effectory, an international organization that conducts employee surveys to help organizations use employee engagement to improve organizational performance.

4 Both terms were used by people interviewed in February 2015 by author Bradford H. Gray.


6 As explained by Olivier van Noort of the insurer Menzies, there are three levels (basic, extra, and special) of three functions—nursing, personal care, and counseling—and AIV (advice, information, and education for people with diseases like diabetes or COPD who don’t need long-term care but who do need a few hours of education for secondary prevention purposes). Basic care takes place according to a plan (e.g., five hours a week for assistance in bathing and dressing). Extra is for unscheduled 24/7 care. Special is for complex patients that require more than ordinary services (e.g., active case management).

7 During the years of Buurtzorg’s growth, determinations of patients’ eligibility for home-care services were made by independent organizations related to the insurance companies. The services provided by home-care organizations operated within the constraints of “indications” of need—e.g., for how many hours of what sort of care over what period of time.


9 De Blok said in early 2015 that 70 percent of Buurtzorg’s nurses have the equivalent of a bachelor’s degree and most of the others have at least two to three years of training. The organization’s emphasis on a highly trained workforce distinguishes it from prevailing practices in Dutch home care.

10 The Omaha System is an electronic standardized taxonomy used for planning, documenting, and analyzing client care. It includes a problem classification system (42 environmental, psychosocial, physiological, and health-related behavioral problems), an intervention scheme that covers different services, and an outcome-rating scale for knowledge, behavior, and health status. It is used by Buurtzorg not only for planning and documenting care but also for billing and analyses of patterns of services.

11 Coaches rely on experience. The rich electronic data trove created by nurses is not yet being used to create a learning health care system in which data about services are analyzed for lessons for health care improvement.

12 According to Zwart, such problems include coping with absences because of illness, poor performance of a colleague, disagreements within teams about some patient care issue, and issues regarding management of teams’ financial performance.

13 Nurses who fall below the target of 60 percent of their time in a year spent on billed-for services are notified.

14 Email correspondence with Jos de Blok, February 27, 2015.

A large stack of transmittal letters conveying employment contracts to new nurse employees was on the table awaiting de Blok’s signature on the day Gray visited Buurtzorg’s offices in Almelo in February 2015. De Blok said that on average the organization hired about 150 new nurses per month.

This summary comes from Monsen and de Blok, “Buurtzorg Nederland,” 2013.

Buurtzorg was able to meet patients’ needs in far fewer hours than had been authorized. See note 7.

One of these involved a dispute with insurers when Buurtzorg, because of its rapid growth, exceeded the number of patient care hours for which it had contracted. The dispute was eventually settled, largely in Buurtzorg’s favor.

We were told that there had also been claims that Buurtzorg’s relatively lower costs might be because of selection of patients with light care needs.

David Ikkersheim, director of the KPMG study, also noted in a personal communication that the study’s case-mix adjustment (which included patients’ zip codes) accounts for differences in travel time.

A. J. E. de Veer et al., Ervaringen van Buurtzorgeclienten in landelijk perspectief (NIVEL, 2009).

These were the Consumer Quality Index based on a survey conducted biennially for the government and the Net Promoter Score (the percentage who would recommend the organization to a friend minus the percentage who would not do so).

Variables in the case-mix adjustment included patients’ age, sex, zip code, socioeconomic status, and “pharmaceutical cost group” as a proxy for high-cost conditions including COPD/severe asthma, depression, diabetes (I and II), cardiac disorders, HIV/AIDS, cancer, kidney disorders, Parkinson, psychosis/Alzheimer’s, addiction, rheumatism, and transplants.

The Minnesota location grew from de Blok’s attendance at a University of Minnesota conference about the Omaha care documentation system and the subsequent visit to Buurtzorg by Minnesota AARP’s Michele Kimball (who became the initial leader of Buurtzorg USA) and several Minnesota nurses.

Information about the American Buurtzorg comes primarily from two of the founders, Michele Kimball and Michelle Michels, the first nurse hired who is now director of the organization.

We are grateful to Maureen Bisognano of the Institute for Healthcare Improvement for discussion of these points.
Appendix A. List of Interviewees

Jos de Blok, Gertje van Roessel, Arent Jan Zwart
Buurtzorg Nederland

Olivier van Noort
Menzies (Dutch insurer)

David Ikkersheim
KPMG Plexus

Ineke van der Voort
Dutch Health Care Institute

Anno Pomp
Ministry of Health, Welfare, and Sport

Petra Schout
Dutch Patient and Consumer Federation

Irma Harmelink
ZorgAccent (competing home care organization)

Rob Dijkstra
Dutch College of General Practitioners

Guus van Montfort and Hillie Beumer
ActiZ (trade association)

Marjet van Baggum and Sander Koopman
Dutch Healthcare Authority

Marieke J. Schuurmans
University Medical Center Utrecht

Ab Klink
Former Minister of Health, Welfare, and Sport
### Appendix B. Patient and Nurse Satisfaction with the Netherlands’ Buurtzorg Home-Care Model

<table>
<thead>
<tr>
<th>Patient satisfaction</th>
<th>Nurse satisfaction</th>
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<tbody>
<tr>
<td>• In a 2015 study, Buurtzorg patient ratings on measures pertaining to physical care, staff quality, information, and participation were in the top 10 of 370 home health agencies.¹</td>
<td>• Buurtzorg Nederland was named the best employer in the Netherlands in 2010, 2011, and 2012 by Effectory, a Dutch company that collects, analyses, and uses feedback from employees and customers.³</td>
</tr>
<tr>
<td>• In a 2015 study, Buurtzorg ranked 7th of 360 home health agencies on whether patients said they would recommend their provider to family and friends.¹</td>
<td></td>
</tr>
<tr>
<td>• In 2012, Buurtzorg ranked 1st among all home-care organizations in patient satisfaction in the national quality-of-care assessment.²</td>
<td></td>
</tr>
<tr>
<td>• Patient satisfaction was measured at 9.1 out of 10 in a study conducted from 2008 to 2010.³</td>
<td></td>
</tr>
<tr>
<td>• In 2009, Buurtzorg had the highest satisfaction rates among patients anywhere in the country.⁴</td>
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About the Authors

Bradford H. Gray, Ph.D., is a senior fellow at the Urban Institute in Washington, D.C., editor of The Milbank Quarterly, and senior advisor to The Commonwealth Fund’s Harkness Fellowships Program. He previously directed the Division of Health and Science Policy at the New York Academy of Medicine. He was director of the Program on Nonprofit Organizations at Yale University, where he also directed the Institution for Social and Policy Studies and was a professor of public health. Earlier in his career, he was a study director at the Institute of Medicine and a staff member for the National Commission for the Protection of Human Subjects and the President’s Commission for the Study of Ethical Problems in Medicine and Research. He has written extensively about for-profit and nonprofit health care, and has also done research on Medicaid, managed care, ethical issues in research, and the politics of health services research. He holds a Ph.D. in sociology from Yale University. He is a fellow of AcademyHealth and the Hastings Center and a member of the Institute of Medicine.

Dana O. Sarnak, M.P.H., is research associate for The Commonwealth Fund’s International Program on Health Policy and Practice Innovations (IHP), having been promoted from program associate for research and fellowships. In her new role, Ms. Sarnak provides the international program with ongoing research, writing, and analytic support. She is a key member of the IHP survey team, playing an important role in designing and analyzing the data for the Fund’s annual international health policy surveys and coauthoring the annual survey article. She joined the Fund in February 2013 having previously served as a policy analyst for the Institute for Children, Poverty, and Homelessness. Ms. Sarnak holds an M.P.H. in International Community Health from New York University.

Jako S. Burgers, M.D., Ph.D., is a general practitioner and senior researcher at IQ Healthcare, based at the Medical Centre of Radboud University Nijmegen in the Netherlands. In the 1990s he coauthored several guidelines produced by the Dutch College of General Practitioners. His thesis, “Quality of Clinical Practice Guidelines,” was honored with the CaRe Award 2002 of the Netherlands School of Primary Care Research. In the 2000s Burgers became a leader in guideline methodology, with a focus on primary care and care coordination.

Acknowledgments

In addition to the people mentioned in Footnotes 6 and 27, we benefited from advice from Sharda Nandrum, Dione Kringos, Karen Heleen te Velde, Gerdien Franx, and Patrick Jeurissen in the Netherlands and Maureen Bisognano, Karen Monsen, Mary Jo Kreitzer, Susan Reinhard, Carol Raphael, Robin Osborn, and Robert Kane in the United States.

Editorial support was provided by Martha Hostetter.
The aim of Commonwealth Fund–sponsored case studies of this type is to identify institutions that have achieved results indicating high performance in a particular area of interest, have undertaken innovations designed to reach higher performance, or exemplify attributes that can foster high performance. The studies are intended to enable other institutions to draw lessons from the studied institutions’ experience that will be helpful in their own efforts to become high performers. It is important to note, however, that even the best-performing organizations may fall short in some areas; doing well in one dimension of quality does not necessarily mean that the same level of quality will be achieved in other dimensions. Similarly, performance may vary from one year to the next. Thus, it is critical to adopt systematic approaches for improving quality and preventing harm to patients and staff.