New Website Profiles 24 Innovative Nursing-Driven Models of Health Care Delivery

Increasing visibility for innovative nursing care delivery models that promote new roles

SUMMARY

In 2007–2008, a team at Health Workforce Solutions LLC, a consulting firm in San Francisco, investigated innovative, nursing-driven models of health care delivery, identified 24 models for in-depth study and disseminated detailed information about the 24 on a website created for the project (no longer available).

The purpose was to bring attention to—and promote replication of—models of care that emphasize interdisciplinary collaboration and offer promise for workforce organization in the rapidly changing health care environment.

Staff of the Robert Wood Johnson Foundation (RWJF) believed that the nation's growing shortage of nurses called for an examination of new ways to use existing resources and provide needed nursing services.

Key Results

- A website developed by the project team profiled each of the 24 selected models, providing detailed information on the following:
  - Impetus for the model's development.
  - Key elements.
  - Implementation process and status of replication.
  - Results.
  - Lessons learned by the sponsoring organization.
  - Profile of the model's creator or manager.
  - Tools and resources for potential replicators.
Key Findings

The project team identified eight elements or themes common to many of the 24 models and said these eight characteristics "help describe how they [the models] have changed care delivery, as well as inform future efforts by other organizations." The elements, published in the white paper Innovative Care Delivery Models: Identifying New Models that Effectively Leverage Nurses, are:

- "Elevated Roles for Nurses: Nurses as Care Integrators. In 23 of the 24 models, the sponsoring organization created at least one new role for nurses. In most of these cases, the organization elevated the RN (registered nurse) from a role of traditional care delivery to one of integrating care for the patient."

- "Migration to Interdisciplinary Care: Team Approach. Over half of the innovative care delivery models deploy an interdisciplinary team for care delivery."

- "Bridging the Continuum of Care. New care delivery models are extending their focus beyond the sponsoring organization's primary setting of care; nearly half of the 24 models provide care that bridges the continuum of health care settings."

- "Pushing the Boundaries: Home as Setting of Care. Six of the 24 innovative care delivery models extend the typical definition of health care setting and rely on a patient's home as the primary location for care delivery."

- "Targeting High Users of Health Care: Elderly Plus. Six of the innovative care delivery models target older adults who are heavy users of health care."

- "Sharpened Focus on the Patient. A common element of eleven of the 24 models is the active engagement of the patient and her or his family in care planning and delivery and a greater responsiveness to patient wants and needs."

- "Leveraging Technology in Care Delivery. Over half of the organizations incorporated new technology in their new care delivery models."

- "Driven by Results: Improving Satisfaction, Quality and Cost. All of the models were developed in response to specific problems or concerns about patient quality, patient and provider satisfaction or unsustainable costs and utilization."

Funding

RWJF funded the work from January 2007 through June 2008 with a $729,504 contract to Health Workforce Solutions LLC.

THE PROBLEM

By the early 2000s, many areas of the country were experiencing a shortage of nurses. The nation's aging nurse workforce was one factor; another was the profession's difficulty
in attracting and educating new entrants. Experts expected the shortage to become more severe in the coming years as the U.S. population aged and the demand for care grew.

RWJF program staff believed the nursing shortage called for an examination of new ways to use existing nursing and other resources and the invention of innovative practice models to provide needed nursing services.

In addition to improving patient outcomes, the implementation of effective new models of care could increase workforce satisfaction and retention, said Susan B. Hassmiller, PhD, RN, RWJF senior advisor for nursing.

For a state-by-state projection of the nursing shortage through the year 2020, see an interactive map created by RWJF. For an overview of the factors responsible for the shortage, see a 2006 interview with Edward O'Neil, PhD, MPA, director of the Center for Health Professions at the University of California at San Francisco. O'Neil is on the staff of the Robert Wood Johnson Foundation Executive Nurse Fellows program, which seeks to provide advanced leadership opportunities for nurses in senior executive roles in health services, public health and nursing education who aspire to lead and shape the U.S. health care system of the future. (For more information on the program, see Program Results Report.)

**An Initial Study**

In 2005, Health Workforce Solutions LLC, a consulting firm in San Francisco, identified and profiled 15 innovative nursing care delivery models as part of a study conducted for Partners HealthCare, an integrated health care system based in Boston.

RWJF staff believed an expansion of that work could benefit the health care field and help inform RWJF's efforts to develop the health care workforce.

**THE PROJECT**

From January 2007 through June 2008, a research team at Health Workforce Solutions LLC investigated innovative, nursing-driven models of health care delivery, identified 24 models for in-depth study and disseminated detailed information about the 24 on a website created for the project.

The purpose was to bring attention to—and promote replication of—models that emphasize interdisciplinary collaboration and offer promise for workforce organization in the rapidly changing health care environment.

The study team focused on acute care models and transitional care models (designed for patients who require a short-term regimen of less intensive therapy or treatment following
an acute hospital stay) that interface with acute care nursing services. Outside nurse leaders helped guide the work.

David Cherner, MBA, MPH, the firm's managing partner, directed the project; Bobbi Kimball, MBA, RN, was the principal investigator. O'Neil, a founding partner of the firm, served as advisor.

**Model Selection: Stage One**

Through a broad-based e-mail inquiry that used the listservs of major health care and nursing organizations, the project team solicited suggestions for models to be considered for study. The team also conducted a literature review, researched the Internet and drew on the list of 15 innovative models identified by the firm in its earlier work for Partners HealthCare. From these different sources, the team generated 171 leads.

By applying six assessment criteria developed in discussions with RWJF staff and health care leaders, the team narrowed the 171 candidate models to 60 for further investigation, including interviews with personnel at the sites. The criteria included model innovation, measurable improvement and replicability. See *Appendix 1* for the full set of criteria.

Of the 60 models, 63 percent were hospital-developed; 20 percent came from integrated health systems, and the remaining 17 percent had a variety of sponsoring organizations, including community-based clinics, a public health department and a retail-clinic chain.

**Meetings With Nurses**

In March 2007, the Health Workforce Solutions LLC team met at RWJF in Princeton, N.J., with 26 chief nurse officers and executives, nursing managers and nursing school academics to discuss and help establish the criteria for selecting the most promising of the 60 models for in-depth study and profiling. (See *Appendix 2* for the list of attendees.) The result was refinement of the original criteria to four elements:

- Replicability.
- Innovation.
- Sustainability.
- Demonstrated impact.

For elaboration on each element of the revised criteria, see *Appendix 3*.

In October 2007, the project team convened a second meeting of nurse leaders in Princeton to review the study's findings and to discuss strategies for encouraging replication of the final models selected by the team. Many of the same nurse leaders...
participated as did representatives of several of the selected models. (See Appendix 4 for a list of 30 attendees.)

**Model Selection: Stage Two**

Applying the four-point criteria to the 60 models, the team, in conjunction with RWJF staff, selected 24 models for in-depth study and profiling.

For each of the 24 models, team members either made a visit to the site or conducted multiple phone interviews with relevant individuals, such as the model's developer, an executive of the sponsoring organization and providers working with the model. The team also reviewed published articles and studies about the models.

The team divided the 24 models into three broad categories: acute care models (10), models that bridged the continuum of care (10) and models providing comprehensive care (4).

**Communications**

The project team worked with Burness Communications, Bethesda, Md., to develop a communications strategy for the project and to seek media coverage for the study and its findings. See Results for details.

**RESULTS**

- A website developed by the project team profiled each of the 24 selected models, providing detailed information on the following:
  - Impetus for the model's development.
  - Key elements.
  - Implementation process and status of replication.
  - Results.
  - Lessons learned by the sponsoring organization.
  - Profile of the model's creator or manager.
  - Tools and resources for potential replicators.

Launched in April 2008, the website received more than 9,200 unique visits in the first three months, the team reported to RWJF. The site includes a discussion board for the posting of comments on each model, but this interactive feature went unused. (There was only one posting as of December 2008. The site is no longer available.)
Innovative delivery models received attention through additional communications activities. Team members published two articles in the Journal of Nursing Administration on innovative care models and made seven presentations on the subject at professional meetings, including the 2008 American Hospital Association and Health Forum Leadership Summit and Blue Cross Blue Shield Association National Meeting.


See the Bibliography for details of some of these communications activities.

FINDINGS

In a January 2008 white paper submitted to RWJF and made available on the project website, the team identified eight elements or themes common to many of the 24 models and said these eight characteristics "help describe how they [the models] have changed care delivery, as well as inform future efforts by other organizations."

The white paper Innovative Care Delivery Models: Identifying New Models that Effectively Leverage Nurses describes the eight elements/themes and provided examples, as follows:

- "Elevated Roles for Nurses: Nurses as Care Integrators. In 23 of the 24 models, the sponsoring organization created at least one new role for nurses. In most of these cases, the organization elevated the RN (registered nurse) from a role of traditional care delivery to one of integrating care for the patient."

  As care integrator, an RN "works with increased autonomy to manage and coordinate the care of patients across disciplines and settings."

  Example: Baptist Hospital of Miami created the RN role of patient care facilitator. Essentially a "clinical CEO" for a 12-bed unit, the facilitator "manages patient care needs, serves as a primary contact for physicians and other care providers, and mentors other nurses and allied health workers."

- "Migration to Interdisciplinary Care: Team Approach. Over half of the innovative care delivery models deploy an interdisciplinary team for care delivery. On the inpatient side, nurses lead teams of interdisciplinary providers, including physical therapists, social workers and/or pharmacists." For some outpatient-oriented models, the primary care core team consists of a nurse and clinical social worker. Some comprehensive care models staff interdisciplinary teams able to address a wide spectrum of possible patient needs.

  Example: Living Independently for Elders (LIFE)—a program of the University of Pennsylvania School of Nursing in Philadelphia—provides all-inclusive health care
for older adults who are eligible for nursing home care but choose to remain at home. The LIFE interdisciplinary teams consist of:

- Nurse practitioners.
- Social workers.
- Registered nurses/licensed practical nurses.
- Physical and occupational therapists.
- Registered dieticians.
- Recreational therapists.
- Creative arts therapists.
- Chaplains.
- Nurse's aides.
- Van drivers.
- Physicians.

- "Bridging the Continuum of Care. New care delivery models are extending their focus beyond the sponsoring organization's primary setting of care; nearly half of the 24 models provide care that bridges the continuum of health care settings."

For some of these models, the hospital serves as the primary care setting but follows patients and their care needs into their homes, outpatient clinics and long-term-care facilities. In other cases, an outpatient clinic is the primary setting, with care following patients into the hospital, home and long-term facility.

- "Pushing the Boundaries: Home as Setting of Care. Six of the 24 innovative care delivery models extend the typical definition of health care setting and rely on a patient's home as the primary location for care delivery."

Some of these models target the patient's transition from an acute care hospital or skilled nursing facility to home while others use the home as an alternative setting of care for individuals who otherwise would be admitted to a hospital or long-term-care facility.

Example: Hospital at Home—a program developed by researchers at Johns Hopkins School of Medicine in Baltimore—provides hospital-level care at home as a substitute for traditional acute hospital admission. "Eligible older patients seen in the emergency department are given the option of going home with a multidisciplinary team that provides state-of-the-art acute care services or being admitted to the hospital."
"Targeting High Users of Health Care: Elderly Plus. Six of the innovative care delivery models target older adults who are heavy users of health care." These models "seek to build health care services (e.g., provider networks, technology, care plans) around the needs of the complex older adult."

Example: In the Evercare Care Model—a care coordination program available in 38 states across the nation as part of part of Ovations, a division of UnitedHealth Group—nurse practitioners provide intensive primary and preventive care to older adults and individuals with long-term conditions or disabilities. "They coordinate multiple services, help facilitate better communication between physicians, institutions, patients and their families and help ensure effective integration of treatments."

"Sharpened Focus on the Patient. A common element of eleven of the 24 models is the active engagement of the patient and her or his family in care planning and delivery and a greater responsiveness to patient wants and needs."

Example: To better address patient needs, "three of the models moved from a traditional appointment-based system to one allowing open access, guaranteeing that clients who come to their clinics and centers will be seen."

"Leveraging Technology in Care Delivery. Over half of the organizations incorporated new technology in their new care delivery models." A few models "deploy technology to manage remote populations and complex outpatient care plans."

Example: The Values Driven System in Anchorage, Alaska, which provides care to Alaska Natives, places "telepharmacy-dispensing machines for prescription medications in remote Alaskan villages. Pharmacists in Anchorage control the dispensing machines remotely, and the pharmacists consult with patients directly using Internet-based conferencing technology."

"Driven by Results: Improving Satisfaction, Quality and Cost. All of the models were developed in response to specific problems or concerns about patient quality, patient and provider satisfaction or unsustainable costs and utilization."

The "leaders of each of the 24 models recognize the importance of measuring the impact of their care redesign and demonstrating the value of the new model."

Example: Planetree Patient-Centered Care—an acute care model that seeks to empower patients and families through education and healing partnerships with caregivers—helped Griffin Hospital near New Haven, Conn., "consistently achieve a 97 percent patient satisfaction score." Also, the hospital's admissions "increased 23 percent and outpatient services 74 percent over a 10-year period."
**Additional Findings and Conclusions**

The white paper also included the following:

- "The good news is that a majority of the 24 models have already been replicated, either within the organization to other units or locations or externally to other organizations altogether. Only 38 percent of the models have not been replicated yet."

- "The more challenging news is that in replicating these models, organizations needed to overcome significant barriers." These included "conflicting incentives with current reimbursement systems, insufficient access to executive-level decision-making and fragmented departments and technology."

- "Additional organizations that try to implement these models will face similar challenges, and they will need to adapt the model to their own patient needs and organizational cultures."

- "Many of the 24 models profiled have used guiding principles or values both as a framework for developing their new models but also as an important touchstone during model implementation and when hiring new individuals to staff the model."

A key lesson identified at the October 2007 nurses' meeting is "the importance of grounding new care delivery models in guiding principles or values developed internally by an organization's employees and customers."

**LESSONS LEARNED**

1. **Wait until a new website is established and has traffic before launching any interactive features.** The interactive discussion board included at the launch of the project website went unused, at least through 2008. The reason may be that the site was still new, and had no related activity, such as Web-based seminars, to generate online discussion. (Project Director/Cherner)

2. **When undertaking a project aimed at information dissemination, develop the communications strategy at the beginning, and make sure there is dedicated communications staff to support the strategy throughout the effort.** (Project Director/Cherner)

3. **When planning a workshop or roundtable discussion, especially one involving busy executives, build sufficient time into the schedule to accommodate all necessary advance work.** The project team underestimated the amount of time and resources it would take to organize the two meetings with nurse leaders. (Project Director/Cherner)
AFTERWARD

As of December 2008, Health Workforce Solutions LLC continued to maintain the website and field inquiries from organizations interested in innovative approaches to care delivery.

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APPENDIX 1

Six Criteria Used in Selection of the 60 Models for Investigation

Based on conversations with health care leaders, Health Workforce Solutions LLC developed the following set of six criteria to identify innovative care delivery models:

- Nursing care delivery model or interdisciplinary care delivery model with a nursing component and an acute care interface, including transitional care to home setting.

- Innovative—models will be considered innovative if they improve caregiver efficiency, quality and/or cost through one or more of the following changes:
  - New roles for nurses and other professionals.
  - New roles for allied health professionals, students, new graduates.
  - Use of new technology (or use of technology in a new and novel way).
  - Redesign of physical layout, inventory or other support systems.

- Model demonstrates measurable improvement in quality, safety, cost and/or (patient or caregiver) satisfaction.

- Model decreases long-term demand for acute care nursing through more effective leveraging of nurses.

- Model can be replicated in other facilities or communities.

- Model primarily serves adult patients over age 18.

APPENDIX 2

Attendees of the March 5, 2007 Meeting of Nurse Leaders

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APPENDIX 3

The Four Elements of the Final Ranking Criteria

- Replicability, the ability to replicate the model widely in health care organizations throughout the country.

- Innovation, as exemplified by redesigned provider roles and teams, greater reliance on interdisciplinary teams, introduction of new technology, increased responsiveness to patients and/or the redesign of the physical care environment.

- Sustainability of the model at the original organization and likely sustainability at replication sites.

- Demonstrated impact in terms of reduced cost or use, improved patient safety and quality, improved patient and provider satisfaction and ultimately the ability to reduce the long-term demand for acute care nurses.

APPENDIX 4

Attendees of the October 26, 2007 Meeting of Nurse Leaders

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BIBLIOGRAPHY

(Current as of date of the report; as provided by the grantee organization; not verified by RWJF; items not available from RWJF.)

Articles


Reports


Grantee Websites