Penn Medicine’s Home Care and Hospice Services

Alignment, Collaboration and Innovation Across the Care Continuum

The Trident of Successful Organizational Leadership in an Integrated Healthcare Delivery System

Nina O'Connor, MD FAAHPM
Chief, Palliative Care, University of Pennsylvania
Chief Medical Officer, Penn Wissahickon Hospice and Caring Way

Joan Doyle, RN, MSN, MBA
Executive Director, Penn Home Care and Hospice Services

University of Pennsylvania Health System
In 2018, *Forbes* even named Penn Medicine the country’s top health care employer and sixth best employer overall.
Penn Medicine Profile: Fiscal Year ‘18

<table>
<thead>
<tr>
<th>Penn Medicine</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licensed Beds</td>
<td>2,989</td>
</tr>
<tr>
<td>Revenues</td>
<td>$6.1 Billion</td>
</tr>
<tr>
<td>Adult Admissions</td>
<td>118,445</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>4,123,729</td>
</tr>
<tr>
<td>Home Care visits</td>
<td>450,000</td>
</tr>
<tr>
<td>Births</td>
<td>16,160</td>
</tr>
<tr>
<td>Employees</td>
<td>39,400</td>
</tr>
</tbody>
</table>

Five hospitals located in Philadelphia, Chester County, and Lancaster, Pennsylvania
Multiple ambulatory sites in PA and NJ
Merger with Princeton Health Care December, 2017
Penn Medicine is setting course for the future of health care

A future that’s patient centered.

A future that solidly integrates the continuum of care.

A future that contains costs, and sustains quality.

---

Penn Home Care and Hospice Services is helping move the needle on all these goals.

---

**BLUEPRINT**

**FOR QUALITY & PATIENT SAFETY**

<table>
<thead>
<tr>
<th>ENGAGEMENT</th>
<th>CONTINUITY</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involving faculty and staff as partners with patients and families to achieve goals of care.</td>
<td>Delivering seamlessly coordinated care across all settings and service lines.</td>
<td>Providing high quality, efficient care and the best outcomes for all patients.</td>
</tr>
</tbody>
</table>
## Penn Home Care and Hospice Services

<table>
<thead>
<tr>
<th>Penn Care at Home</th>
<th>Penn Home Infusion</th>
<th>Penn Wissahickon Hospice</th>
<th>Inpatient Hospice at Rittenhouse</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Specialties in Cardiology, Oncology, Neurology, Orthopedics, Diabetes</td>
<td>- Intravenous medications and other complex therapies</td>
<td>- Palliative care, pain management and counseling</td>
<td>- State-of-the-art 20-bed hospice care</td>
</tr>
<tr>
<td>- Telehealth monitoring</td>
<td>- Services include oncology, pain management, infectious disease, cardiology and nutrition</td>
<td>- Caring Way program provides palliative care for patients actively seeking curative treatment</td>
<td>- 24/7 visiting hours</td>
</tr>
<tr>
<td>- ADC  1900</td>
<td>- 24/7 infusion pharmacy</td>
<td>- Hospice ADC 250</td>
<td>- On-site cross-functional staff</td>
</tr>
<tr>
<td></td>
<td>- ADC of 1400</td>
<td>- CW ADC 220</td>
<td></td>
</tr>
</tbody>
</table>

### Key Statistics

4,765 average daily census

1200 employees
Penn Home Care and Hospice Services

**Neighborhood Health**
- Home Health Services
  - 63,000 visits/year
  - ADC - 350
- Senior Link Program

**Neighborhood Hospice**
- Home Hospice
  - 54,000 days of care
  - ADC 110
- 22 bed inpatient hospice unit

**Princeton Home Health and Hospice**
- Home Health
  - ADC 405
- Home Hospice
  - ADC 70
- Caregivers
  - ADC 60
Care Shift to the Home

- Value based purchasing
- Readmission penalties
- Bundle payments
- Insurance site of care shift for infusion therapy
- Shift of appropriate patients from Skilled Nursing Facilities to Home Health
- Aging demographics and increase of chronic disease
Referrals have increased **25%** over five years.

**PHCHS Admissions**

- FY 11: 20,516
- FY 14: 21,660
- FY 16: 23,496
- FY 17: 25,821
- FY 18: 32,675

**HCHS Visits**

- FY 11: 202,983
- FY 16: 258,059

*Note: NHA joined PHCHS 7/1/2018. Princeton Home Health and Hospice not included in statistics.*
HCHS works with the rest of Penn Medicine to build out the continuum of care

We’re integral to Penn’s strategic direction

- Partnering with the Office of the CMO, Service Line leads, and Primary Care - HCHS manages Penn Medicine Continuity Services.
- We’re a key player in Penn’s bundled payment initiatives.
- Long history of leadership of strategic system-level committees like the Transitions Steering Committee and the Post-Acute Care Partnership.

We’re standardizing on the same clinical pathways

- We’re working with the service line disease teams to follow standard clinical pathways, starting with Heart & Vascular, Oncology, Neuroscience and Musculoskeletal.

We innovate clinically

- Telehealth
- Penn Innovation Center
- Automated FU phone calls
- Caring Way
- Hospital at Home

We’re a clinical partner to the rest of UPHS

- Consults, goals-of-care conversations, field rotations.
- We identify trends with our health system partners—readmissions tracers and case conferences.
- We review real-time readmission feedback—and take action with our hospital counterparts.
- We have the same electronic records—and actively share information.
The future of post-acute care is Continuity

The aim of Penn’s Transitions-in-Care model is to keep patients healthy and safe across the continuum of care.

Penn will build on a growing set of interventions that help integrate the care continuum with a focus on building continuity across UPHS

<table>
<thead>
<tr>
<th>Risk Stratification</th>
<th>Interdisciplinary Care</th>
<th>Closing the Loops</th>
<th>Getting Information to the Right Place</th>
<th>Followup Programs &amp; New Payment Models</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Risk assessment linked to interventions</td>
<td>• Shared clinical protocols across the continuum</td>
<td>• Referrals to post-acute services</td>
<td>• PCP contact info</td>
<td>• Integrated platform of wraparound programs</td>
</tr>
<tr>
<td>• Real-time readmission feedback</td>
<td>• Patient &amp; family education</td>
<td>• Followup appointments &amp; slots</td>
<td>• Discharge summary to next provider</td>
<td>• Care connectors</td>
</tr>
<tr>
<td></td>
<td>• Med rec across the continuum</td>
<td>• Followup phone calls</td>
<td>• Loopback communication &amp; trouble-shooting</td>
<td>• Bundled payment experiments</td>
</tr>
<tr>
<td></td>
<td>• Goals of care conversations</td>
<td>• MyPenn Pharmacy</td>
<td>• Same EMR across Penn Medicine</td>
<td></td>
</tr>
</tbody>
</table>

Prevention ➤ Hospital Stay ➤ Post-acute Services/ Chronic Care Management

Pen Medicine
Vision and Strategy for Care in the Home

- Standardized and coordinated clinical care model in the home across Penn Medicine’s regional service area

- Integration will enable the development and implementation of innovative clinical care in the home to all Penn patients

- Strategic suite of services in the home to align with Penn Medicine Hospitals, Service Lines, and Penn Medicine Medical Group goals

- Creation of meaningful capacity across inpatient hospital settings by lowering readmission rates and reducing the overall cost of care
Benefit of an Integrated Home Based Service Model

- Leverage Technology—shared clinical information and outcomes across all Penn Medicine Home Based Care providers and consistent clinical documentation in PennChart

- Accountability for Outcomes—centralized ability to measure and manage performance

- Implementation of Best in Class Clinical Team—access to educational programs and specific clinical competencies to develop and support clinical staff in the home and community

- Standardized Patient Experience—clinical excellence and coordination regardless of patient geography and care needs

- Execution of Clinical Pathways—ensure adherence to service line and disease team clinical pathways in the home

- Economies of Scale—consolidation of administrative and clinical support functions to support clinical operations
Collaboration Beyond Traditional Home Health

- Scope of services extends beyond traditional Home Care / Hospice to best meet unique patient needs and align with health system goals
- Partnerships with multidisciplinary Penn Medicine teams to provide leading-edge care in the home and community
Palliative Care
Community-Based Services and Innovation
Case Study: Mr. M

72 year old male with metastatic prostate cancer, early dementia, and multiple recent falls at home

- Admitted to the hospital after fall
- Discharged to a skilled nursing facility
- Struggled with delirium and pain control
- Refused to work with physical therapy
- Transferred back to hospital for UTI
- Ultimately discharged home with wife
- Increasing difficulty getting to oncology clinic for appointments and treatment
- Caregiver stress and isolation
What are Mr. M’s needs?

- 1) Pain and delirium management
- 2) Psychosocial and caregiver support
- 3) Advance care planning and goal setting
- 4) Complex care coordination across settings
What is Palliative Care?

From the Center to Advance Palliative Care (CAPC):

Palliative care is specialized medical care for people with serious illnesses. This type of care is focused on providing patients with relief from the symptoms, pain, and stress of a serious illness - whatever the diagnosis.

The goal is to improve quality of life for both the patient and the family. Palliative care is provided by a team of doctors, nurses, and other specialists who work with a patient's other doctors to provide an extra layer of support. Palliative care is appropriate at any age and at any stage in a serious illness, and can be provided together with curative treatment.
Old Model of Palliative Care

Disease-Directed Therapies

Diagnosis

Palliative Care

Death and Bereavement
Mr. M could have received palliative care in all settings
Where should palliative care be delivered?
Community-Based PC at Penn Medicine

- Developed under Penn Homecare and Hospice Services
  - Smooth transitions to hospice at home
  - Right patient to right program

- Close collaboration with inpatient palliative care programs
  - Bidirectional handoffs and referrals

- Data driven program development
  - Identification of high priority populations for health system
    - Readmission rates
    - Bundles

- Partnership with service lines on palliative pathways
Community-Based PC at Penn Medicine

Caring Way
- Home Health license
- RN, LPN, SW, chaplain, NP, HHA
- ADC approx. 200 patients
- TJC certified

Community-Based PC

SNF PC consults
- New service in 2018
- PC NP consults and follow-up visits
- Emphasis on goals of care and transitions

Hospice
- Home and inpatient hospice
- High acuity (VADs, pressors, transfusions)
- ADC approx. 250 patients
Caring Way: Exemplary PC at Home

- Winner of the 2018 “Circle of Life Award”

- Multiple strategies to promote interdisciplinary teamwork
  - Frequent case conferences and team meetings
  - Physician and nurse practitioner support
  - Social work, chaplain, and child bereavement services
  - Joint visits with hospice to ease transitions
  - Close collaboration with hospital PC teams

- Unique use of technology
  - Telehealth monitoring
  - Same EHR as rest of Penn Medicine for transparency
  - Online Advance Care Planning tool that uploads to EHR
Program Case Study: Heart Failure

Partnership between Cardiovascular Service Line, Caring Way, and Penn Center for Innovation
INPATIENT DEATHS PER YEAR
FROM HEART FAILURE

Hospital of the University of Pennsylvania
Chester County Hospital
Presbyterian Hospital
Pennsylvania Hospital

450
50% reducing hospitalizations by 50% in the last year of life

3,262 acute care days/year

$13 million in care costs/year
## Fact finding: Cardiology and Palliative Care

<table>
<thead>
<tr>
<th>Assumption</th>
<th>Facts</th>
</tr>
</thead>
</table>
| Hospitalizations are necessary for symptom management and HF exacerbations | Patients prefer to maximize time at home  
Symptoms can be managed at home |
| Hospice can’t actively manage HF medications | Optimal HF management is the best palliation for symptoms  
Homecare and hospice clinicians can be trained to provide HF care |
| Palliative care is difficult to find in the outpatient setting | No PC clinic for non-oncology patients  
Home PC services are available but not well understood by providers |
1. Support cardiology care teams in referring appropriate patients to Advanced Heart Care at Home

2. Build a heart failure specific program within Caring Way and Penn Wissahickon Hospice
Building a Shared Vision
Advanced Heart Care at Home

Specialized Pathway Within Home Palliative Care and Hospice:

- Home nursing visits
- Heart failure meds & monitoring
- IV diuretics at home
- Palliative care NP visits
- Social work visits
- Support for family
- Telemedicine support
- Transitions to hospice at home
Nudging Referrals from Hospitals

**Process**

1. Identify inpatients using mortality risk score
2. Alert cardiology team using secure texting
3. Cardiology refers amenable patients

**Early results**

% HF inpatients referred to home palliative care:

- Baseline: 0%
- Inpatient pilot: 21%
In a control group of 41 patients, only one went to hospice. Discharged patients have a high risk of readmission/death.
Early Pathway Outcomes

Average hospice LOS

5 days
Baseli

38 days
Pathway
% Patients receiving IV diuretics at home

32% Control

63% Pathway
Advanced Heart Care at Home: Next Steps

- Randomized controlled trial to evaluate outcomes
- Discussions with payers – high level of interest
- Continued refinement of clinical pathway
- Ongoing heart failure education for front-line staff

Potential to extend concepts to other progressive diseases:
- Advanced Lung Disease
- Hematologic Malignancy
- End-Stage Liver Disease