Pursuit of the Perfect Patient Experience: How Virginia Mason Became a High Performing Healthcare System

Sarah Patterson, Executive VP & COO

The King’s Fund Annual Conference
November 13, 2014
• Integrated health care system
• 501(c)3 not-for-profit
• 336-bed hospital
• Nine locations
• 500 physicians
• 5,000 employees
• Graduate Medical Education
• Research Institute
• Foundation
• Virginia Mason Institute
Our Founders
Time for a Change

Year 2000

Issues
  – Survival
  – Retention of the Best People
  – Loss of Vision
  – Build on a Strong Foundation

Leadership Change

A Defective Product
An Embarrassingly Poor Product
Clash of “Promise” and Imperatives

Traditional “Promise”
Legacy Expectations

- Autonomy
- Protection
- Entitlement

Imperatives

- Improve safety/quality
- Implement EHR
- Create service experience
- Be patient-focused
- Improve access
- Improve efficiency
- Recruit/retain quality staff
Why is Change so Hard?

Improvement Method

Technical & Human Dimensions of Change

Sense of Urgency

Visible & Committed Leadership

Shared Vision

Aligned Expectations
### Aligning Expectations

**Physician Compact**

**Organization’s Responsibilities**
- Focus Excellence
  - Enhance patient safety and satisfaction
  - Improve population health and quality of care
  - Engage in evidence-based practice
- Support continuous improvement
  - Foster collaboration among disciplines
  - Promote open communication and transparency
- Enhance the patient experience
  - Improve satisfaction with care
  - Increase access to care

**Physician’s Responsibilities**
- Focus on Patient-Centered Care
  - Ensure quality and safety
  - Engage in evidence-based practice
  - Foster collaboration among disciplines
- Enhance the patient experience
  - Improve satisfaction with care
  - Increase access to care

**Virginian Mason Medical Center Physician Compact**

**Leadership Compact**

<table>
<thead>
<tr>
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<td>Create a culture where the patient comes first; in everything we do, respect that the patient is the holder of the highest level of ethical and professional conduct.</td>
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<tr>
<td>Establish a culture that supports accountability and performance excellence.</td>
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**Conditions**

- Ensure the recruitment and retention of high-performing physicians and nurses
- Promote patient safety and satisfaction
- Engage in evidence-based practice
- Foster collaboration among disciplines
- Enhance the patient experience

**Board Member Compact**

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  - Review the organization’s mission, values, and goals
  - Participate in strategic planning
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**Contact Information**

- Virginia Mason Medical Center
- Address: 9010 164th Ave NE, Bellevue, WA 98004
- Phone: 425-606-1000
- Website: www.virginiamasonicmedicalcenter.org
Virginia Mason

OUR STRATEGIC PLAN

Patient

VISION
To be the Quality Leader and transform health care.

MISSION
To improve the health and well-being of the patients we serve.

VALUES
Teamwork | Integrity | Excellence | Service

Strategies

People
We attract and develop the best team

Quality
We relentlessly pursue the highest quality outcomes of care

Service
We create an extraordinary patient experience

Innovation
We foster a culture of learning and innovation

Virginia Mason Foundational Elements

Strong Economics | Responsible Governance | Integrated Information Systems | Education | Research | Virginia Mason Foundation

Virginia Mason Production System

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The VMMC Quality Equation

\[ Q = A \times \frac{O + S}{W} \]

Q: Quality
A: Appropriateness
O: Outcomes
S: Service
W: Waste
Seeing with our Eyes
Japan 2002
The Virginia Mason Production System

1. The patient is *always* first
2. Focus on the highest quality and safety
3. Engage all employees
4. Strive for the highest satisfaction
5. Maintain a successful economic enterprise
Taiichi Ohno’s Seven Wastes

- **Time**
  - idle time, time spent waiting

- **Inventory**
  - too much or not enough

- **Motion**
  - people moving

- **Defects**
  - mistakes that aren’t corrected

- **Overproduction**
  - making too much

- **Processing**
  - doing the same thing repeatedly or making it complicated

- **Transportation**
  - moving things

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Thinking Differently

• ½ the human effort
• ½ the space
• ½ the equipment
• ½ the inventory
• ½ the investment
• ½ the engineering hours
• ½ the new product development time
A Common Language and Tools for Improvement

- Value Stream Development
- 5S (Sort, Simplify, Standardize, Sweep, Self-discipline)
- Standard Work
- Flow
- Mistake Proofing
- RPIW (Rapid Process Improvement Workshop)
Changing the Culture: Stopping the Line
“Stopping the Line”
Organization-wide Engagement

1. **Staff** report issues using the Patient Safety Alert System
2. **Leadership** investigates and resolves issues
3. **Board Quality Committee** review/approve closure of high-severity issues
40,000th PSA Reported

End of January 2014: 43,615
Changing the Culture:
Celebrating Good Catches
Visual Control for Safety

5S Anesthesia Shadow Board - Before
Visual Control for Safety

5S Anesthesia Shadow Board - After
Central Line Insertion Standard Work

Before

Dry:
30 sec scrub
30 sec dry

Wet:
2 min scrub
1 min dry

Maximum
Barrier
Protection

Thyroid
Angio Drapes

During

Transducer
Kit in Top
Drawer of
Cart

Transducer Method

OR

Manometer Method

OR

After

“Approved to use
Date/Initial”

Yellow — top of cart

White — in chart
progress notes

Complete Paperwork
VMHS Hospital Professional/General Liability Insurance Premiums

% change from previous year, with 74% overall reduction in premium since 2004-05

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Flu Vaccination “Fitness for Duty”

Do we put patient first?
Compelling science
Staff resistance
Staying the course
Organizational Pride
VMPS Concepts of a Flow Station

- Waste of motion (walking)
- Continuous flow
- Visual control (Kanbans)
- External setup
- Water strider
- U-Shaped Cell

Creating MD Flow Reduces Patient Wait Times
“Nursing Cells” – Results > 90 days

RN time available for patient care = 90%!

<table>
<thead>
<tr>
<th>Before</th>
<th>After</th>
</tr>
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<tbody>
<tr>
<td>• RN # of steps = 5,818</td>
<td>846</td>
</tr>
<tr>
<td>• PCT # of steps = 2,664</td>
<td>1256</td>
</tr>
<tr>
<td>• Time to the complete am cycle of work = 240’</td>
<td>126’</td>
</tr>
<tr>
<td>• Patients dissatisfaction = 21%</td>
<td>0%</td>
</tr>
<tr>
<td>• RN time spent in indirect care = 68%</td>
<td>10%</td>
</tr>
<tr>
<td>• PCT time spent in indirect care = 30%</td>
<td>16%</td>
</tr>
<tr>
<td>• Call light on from 7a-11a = 5.5%</td>
<td>0%</td>
</tr>
<tr>
<td>• Time spent gathering supplies = 20’</td>
<td>11’</td>
</tr>
<tr>
<td></td>
<td><strong>Before</strong></td>
</tr>
<tr>
<td>--------------------------</td>
<td>------------</td>
</tr>
<tr>
<td><strong>Time Available</strong></td>
<td>600 min</td>
</tr>
<tr>
<td>(10 hr day)</td>
<td></td>
</tr>
<tr>
<td><strong>Total Case Time</strong></td>
<td>107 min</td>
</tr>
<tr>
<td>(cut to close plus set-up)</td>
<td></td>
</tr>
<tr>
<td><strong>Case Turnover Time</strong></td>
<td>30 min</td>
</tr>
<tr>
<td>(pt out to pt in)</td>
<td></td>
</tr>
<tr>
<td><strong>Cases/day</strong></td>
<td>5 cases/OR</td>
</tr>
<tr>
<td><strong>Cases/4 ORs</strong></td>
<td>20 cases</td>
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A World-Class Management System

Requires Deep, Relentless Engagement

• Visible leadership
• Employees trained in Virginia Mason Production System
• Organizational transparency
• Employees improving their own work

No Superheroes!
Engaging Every Team Member

Easy Little Innovations

EVERYDAY LEAN IDEAS
Leaders Sustain the Rigor

Tuesday Stand Up

Friday Report Out

Standard Work for Leaders:
Production Boards
Huddles
We are Twelve Years into the Journey

The Kaizen Path

Point Improvements
- **Point** (Eliminate waste at source - start at point closest to the customer, root out basic problems, make improvements, build a foundation)
- **Point**
- **Point**

Goal: Flow vs. Batch

Spatial Improvements
- Height (3rd Dimensional)
- **Height**

Goal: Raise to Other Planes

Line Improvements
- **Line**
- **Line**
- **Line**

Goal: A Model Line

Line Improvements
- Vertical development
- Critical Transition from Point to Line
- Change production method from "Push" to "Pull"
- Plan for Levelling
- Develop Standard Operations
- Quickly Solve Flow Problems
- Practice "Visual Control"

Plane Improvements
- **Plane**

Goal: Spread Across Plane

Other processes make point and line improvements based on the model line

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Ongoing Challenges - Culture

- Patient First
- Belief in Zero Defects
- Professional Autonomy
- "Buy In"
- "People are Not Cars"
- Pace of Change
- Victimization
- Leadership Constancy
- Rigor, Alignment, Execution
- Drive for Results
“Distress” and Adaptive Work

Adaptive challenge

Limit of tolerance

Productive range of distress

Threshold of learning

“In times of change, learners inherit the earth, while the learned find themselves beautifully equipped to deal with a world that no longer exists.”

Eric Hoffer