Improving Clinical Quality and Affordability Through Rapid Cycle Design
Integrated Delivery and Finance System

$18B Global Health Enterprise
80,000 Employees

UPMC HEALTH SERVICES DIVISION
UPMC ENTERPRISES
UPMC INSURANCE SERVICES DIVISION
UPMC HEALTH INTERNATIONAL

Leading Academic Medical Center
Integrated Delivery & Financing System

Health Services
39 Academic, Community and Specialty Hospitals
4,000+ Employed Physicians; 600+ Ambulatory Sites
#14 Best Hospital; #9 Best Children’s Hospital - U.S. News
Partnership – University of Pittsburgh – #5 NIH Funding
3rd Largest GME Program (1,750 Residents & Fellows)

Insurance Services
3.4M Health Insurance Members
Leading Market Share: Medicare, Medicaid & Children’s Health, LTSS and Behavioral
4 and 5 Star Medicare and Commercial Ratings NCQA
#1 Member Satisfaction in PA – J.D. Power
Multiple PCORI Awards
Infrastructure to Support Implementing Care and Payment Transformation

Quality Review Committee

UPMC Provider-Payer Transformation Steering Committee

UPMC Center for High-Value Health Care
Value Based Pharmacy and Initiatives
Population Health Meets Precision Medicine

**Population Health**

DECREASE variation in population care

**Precision Medicine**

INCREASE variation in individual care

Targeted therapy (target severe disease and reduce unnecessary care)

Examples:

- fusion genes identify aggressive prostate cancer

The New York Times

It’s Not Cancer: Doctors Reclassify a Thyroid Tumor

An international panel led by UPMC and Pitt strips a type of tumor of its ‘cancer’ title, saving patients from unnecessary and painful life-long treatment.
Large Network Anchored by UPMC

Translational Opportunity

Value-Based Innovation

Translational Opportunity
Promote and enhance visibility and innovation through **externally-funded research** that supports/leverages ongoing work across the Insurance Services Division.

Broadly **disseminate findings** through an active agenda of publication and presentations to spotlight UPMC’s unique IDFS value proposition.
Support Business Innovation, Learning and Dissemination (BuILD) through a collaborative rapid cycle evaluation and learning process.

Iterative rapid cycle evaluation and learning approach to reduce cycle time.

Optimizing key outcome drivers enables programs to become more effective, more quickly and for learnings to be rapidly shared with other program teams as appropriate.

Supports provider-payer transformation teams with design and evaluation and implementation strategies.
Program Evaluation Design Options (Conducted Singularly or in Combination)

**Tracking Metrics**
- Simple, frequent monitoring of key metrics assessing trends/scalability

**Single Group Pre/Post**
- Pre/post comparison of participants receiving intervention
- No comparison to those not receiving intervention
- Established trend adjusted program goals for outcomes improve ability to learn

**Descriptive/Trajectory Analysis**
- Descriptive analysis of outcome trend: whether trend changed and if so, when
- Can be applied to programs with insufficient sample size for more robust analysis

**Program Subpopulation Analysis**
- Analysis of participants to understand attributes of outcome success
- This design often used when a program has clear selection criteria but lacks a comparison group
- Will point out which kind of members are responding to program or engaging in program but cannot be used to assess overall efficacy
- May be used in tandem with other designs

**Intent to Treat**
- All eligible members for program (i.e., intended to be treated) included in analysis
- Will typically yield difference in differences analysis, thus assessing the program compared to “usual care”

**Comparison Group**
- Non-random comparison group (e.g., propensity score, waitlist, rest of network)
- Cannot compare participants to non-participants due to extreme selection bias

**Randomization**
- Random assignment to intervention vs. control condition
- Typically applied when a program is referral based thus having no discrete selection criteria or comparison group that can be replicated

When a program needs randomization to assess efficacy, having robust sample size estimates is critical; estimates can be used to estimate how long we need to randomize before evaluation and randomization shut-off

**Directional Monitoring Only/No Causality**
- Identifies Outcomes Subgroups

**Can Infer Causality/Assess Program Efficacy**
Provider-Payer Transformation Teams

### Primary Care Transformation
1. Create team-based primary care
2. Develop new primary payment models
3. Align primary care with full ambulatory continuum

### Specialist Care Transformation
1. Refine protocol-based care
2. Reduce unnecessary practice variations
3. Ensure appropriate utilization
4. Enhance shared decision support
5. Improve specialty-primary care coordination
6. Create specialty medical homes

### Post-Acute Care Transformation
1. Develop innovative home and community-based treatment capacity
2. Optimize coordination of post-acute care services
3. Enhance patient and family education, outreach, and support

### Supportive/Palliative Transformation
1. Improve quality of life for terminally ill
2. Enhance in-home and other “hospice-type” services
3. Enhance ambulatory-based education and support

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### Key Metrics

#### Post-acute Follow-up Rates ↑
- Unplanned Care Rates ↓
- Surgery Rates ↓
- Readmission Rates ↓
  - ASC Rate
  - ER Presentation Post-Acute
  - CMS Stars (all causes)

#### PCP : Specialist Ratio
- Post-acute Follow-up Rates ↑
- Unplanned Care Rates ↓
- Surgery Rates ↓
- Readmission Rates ↓
  - ASC Rate
  - ER Presentation Post-Acute
  - CMS Stars (all causes)

#### Patient/Family Satisfaction ↑

#### Key Metrics

- Palliative Care & Hospice Utilization ↑
- Readmits 90 Days Pre-Death ↓
- Chemo/Radiation 30 Days Pre-Death ↓
- Patient/Family Satisfaction ↑

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*Supported by people, business process and technology; predictive and prescription analytics; and aligned benefit designs and network configuration and management.*
Transforming Care Through Value Based Payment Design

500 Medical Home Sites

Primary Care "Medical Home" Risk Sharing
Physicians incentivized to improve quality and reduce non-value add care

UPMC Health Plan Value Based Insurance Design
Five year Medicare Advantage Value Based CMS demonstration project
Our approach: Engage members with CHF, COPD and Diabetes in incentive program

Specialty Medical Home IBD
Team-based care to improve quality and cost outcomes

Post Acute In-Home Services
Transitions in care for high risk elderly

New Payment Model for Oncology Services
Five year CMS Oncology Care Model (OCM) in partnership with UPMC’s Oncology-Hematology Associates

Bundled Payments
Orthopedics ■ Spine ■ Maternity ■ Obstetrics ■ AMI/CABG

Immediate Support
Sustained Engagement
Better Clinical Outcomes
Reduced Medical Spend