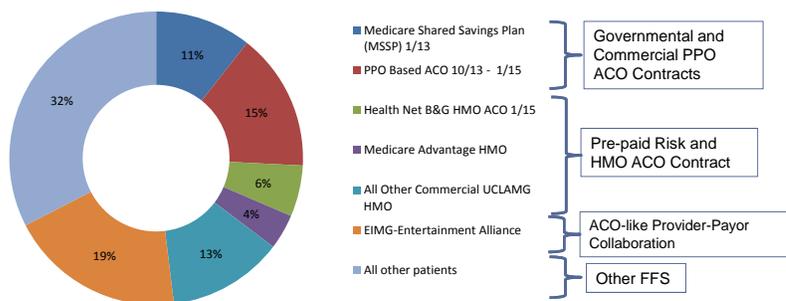


A Scalable Approach to Value Creation for High-risk Complex Conditions

Reshma Gupta, M.D. M.S.H.P.M.
 Medical Director for Quality Improvement
 UCLA Health

UCLA Health in Rapid Transformation Primary Care Base: >2/3 in ACO/Risk relationship



Primary Care Population is ~310,000
 (based upon FPG Attribution method)

PPO-Based ACO: (N= 47,000)
 HMO Based ACO: (N=17,000)
 Medicare Shared Savings Plan ACO: (N=33,000)

Our Philosophy

Caring for Patients...

- We are incentivized to think more holistically about the patient.
- We are balancing a culture of providing and maintaining high quality care with building a culture of delivering high value care.

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Developing a Culture for Quality & Value

Academic Medicine, November 26, 2016 Perspective

Swimming Upstream: Creating a Culture of High-Value Care

Reshma Gupta, MD, MSHPM, and Christopher Moriates, MD

Abstract

As health system leaders strategize the best ways to encourage the transition toward value-based health care, the underlying culture—defined as a system of shared assumptions, values, beliefs, and norms existing within an environment—continues to shape clinician practice patterns. The current prevailing medical culture contributes to overtesting, overtreatment, and health care waste. Choosing Wisely lists, appropriateness criteria, and guidelines codify best practices, but academic medicine as a whole must recognize that faculty and trainees are all largely still operating within the same cultural climate. Addressing this culture, on both local and national levels, is imperative for engaging clinicians in reforms and creating sustained changes that will deliver on the promise of better health care value. This Perspective outlines four steps for health system leaders to understand, cultivate, and maintain cultural changes toward value-based care: (1) Build

Creating Conditions for Improvement

- Prioritization, resources
- Culture, shared goals

Care Team Ownership

- Providers, patients, care teams
- Patient-centered focus

Caring for the appropriate patient at the right time by the right care teams

- Improving quality & value

*Value= improving quality at lower cost, improving quality at similar cost, or maintaining quality at lower cost

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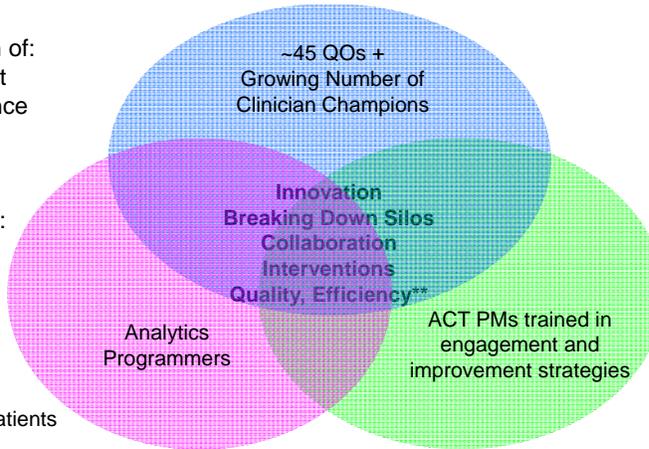
We Developed the Accountable Care Transformation (ACT) Team

Accountable Care Transformation Team

Four years old program residing on a foundation of:

- Clinician engagement
- Implementation science methodology

Breaking down Health IT-Clinician Silos: Meetings are a collaboration between clinicians, improvement specialists, and programmers together.



**Efficiency for system + patients

Quality Officer Support

- Goals are to achieve health systems goals for our patient populations harboring on vital clinical insights
- Philosophy is ground up engagement with guidance to prioritize initiatives and support from the quality program
- Designated Quality Officer (QO) for each department and division
- QO leads care transformation and data transparency efforts within the department/division to reduce total cost of care and improve quality

How the Learning Collaborative Fits into Our Model

Dashboard Management
(>130 dashboards and >2,000 measures)

Analytical Support
(>100 analyses)

Project Management
(methods and programs have led to system savings)

**Increasing Divisional/ Cross Departmental Support
Leveraging this Learning Collaborative**

- All support is aimed at the priorities of UCLA Health
- Support varies by maturation of the project, teams, and resources (Improvement Science Workflow)
- Connect to other group across the system that may be helpful for initiatives
- We meet the needs of the clinical groups in order to effectively make and sustain change

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Care Transformation Engagement Methodology to Achieve Health System Goals

```

graph LR
    A((Readiness Assessment of Divisions/ Depts)) --> B((Implement Change))
    B --> C((Sustain Improvement))
    A --- A1[Resources to empower QOs, support initiatives  
ID clinical opportunities]
    B --- B1[Fill gaps  
Connect dots]
    C --- C1[Continuous support through systematic improvement methods]
    
```

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Key Components of Designing Initiatives

- Initiative Prioritization: Targeting high risk, high cost patients and supporting initiatives with program management
- Clinician Engagement: Harnessing insights and having clinician leadership to bridge vision
- Health Informatics: Supporting robust data that frontline providers believe (i.e. good patient attribution logic), breaking down health IT-clinician silos
- Care Coordination: Leveraging non-physician supports
- Interdisciplinary Teams

Background about Our High Risk, High Cost Patients

Chronic renal failure patients are our 2nd highest cost patients. UCLA has significant costs due to length of stay.

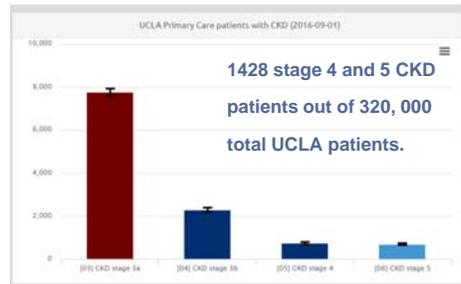
Top Chronic Diseases			
DISEASE	ACTUAL	BENCHMARK	DIFFERENCE
Active cancer	\$392M	\$174M	\$217M
Renal failure	\$125M	\$48.9M	\$76M
Severe dementia	\$46M	\$7.2M	\$38.8M
Liver disease (Hepatitis, Cirrhosis)	\$39.1M	\$10M	\$29.1M
Neurologic disorders	\$52.4M	\$25.5M	\$26.9M

The Story of Our Chronic Kidney Disease Patients

- In 2015, UCLA had 857 inpatient CKD encounters* at an avg LOS of 3.8 days totaling \$7.4 million in direct costs
- In 2015, approximately 200 patients received permacath placement in our hospitals, averaging almost 300 bed days per month.

We lacked:

- Care coordination
- Interdisciplinary team for CKD
- Ambulatory site of care
- Delays in providing dialysis catheters
- Population-based integration with health IT



The Story of Chronic Kidney Disease at UCLA Health

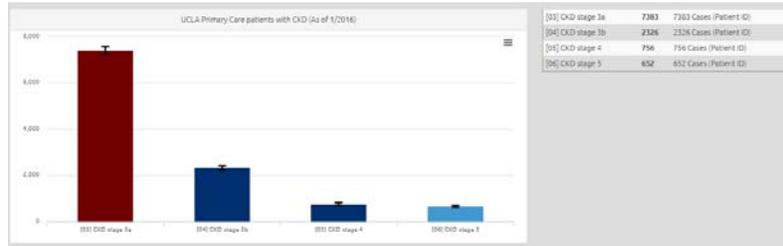
James Wilson, M.D., M.S.
 Kidney Health Program Director
 Director of Kidney Stone Center
 Director of Surgical Consultative Nephrology
 UCLA Health

Chronic Kidney Disease

- Complex and costly patient population
 - ✓Typically 3 or more comorbidities
 - ✓Upwards of 12 prescriptions per day
 - ✓Likely to spend 12 or more days through at least 2 inpatient admissions annually
 - ✓Typically scared and unprepared for dialysis ending in emergent inpatient catheter placement
- Currently no focus on standardization of care for primary care prevention or specialist outpatient intervention

Current UCLA Data

- In 2015, UCLA had 857 inpatient CKD encounters* at an avg LOS of 3.8 days totaling \$7.4 million in direct costs
- In 2015, approximately 200 patients received permacath placement in our hospitals, averaging almost 300 bed days per month.
- 76% of CKD Stage 4 and 5 patients haven't seen a nephrologist in the past year



*APR-DRG's 443, 447, 463, 468

UCLA Kidney Health Program:

The problems we aimed to address

- UCLA CKD Program: the program that wasn't
- We identified substantial unnecessary hospital and ED utilization of our ACO patients with chronic kidney disease
- The fundamental problem was that our care for CKD patients was stuck in the historical model of healthcare that is not integrated nor coordinated, and this resulted in numerous downstream problems.

UCLA Kidney Health Program:

The problems we aimed to address

- Patients and families bore the burden of navigating our system, for example, in scheduling placement of dialysis access lines; this led to delays and suffering.
- There were inefficiencies in care processes, as clinical teams had no systematic approach to manage these complex patients.
- Care was reactive, wherein a patient had an emergent admission for delayed-dialysis causes, and then post-discharge resources were expended to attempt to fix the problem.
- There was wasted utilization that was detrimental for our ACO strategic goals.

UCLA Kidney Health Program:

The problems we aimed to address

- For example, at baseline, we found that our ACO patients had emergent hospital admissions to start dialysis – and used approximately 450 hospital bed-days every month just for this service.
- Goal was to identify specific inefficient systems of care around the management of CKD patients who were close to requiring dialysis.
- Specifically, these patients typically have a several months-long deterioration, but inserting a dialysis access in the ambulatory setting requires nuanced education of patients and detailed care coordination between primary care, nephrology, and radiology/surgery.

UCLA Kidney Health Program:

The Intervention

- The clinical improvement intervention was lightweight and targeted.
- “Buy-In” → get administration support
- Snow ball effect
- Over a 4-month period, monthly meetings between nephrology, primary care, interventional radiology, vascular surgery, care coordination, and informatics developed testable hypotheses and scoped out the intervention.

UCLA Kidney Health Program: The Intervention

Phase 1- 2016 Implementation

<p>Prevention-Focused Goals:</p> <ol style="list-style-type: none"> 1. Primary Care Management <ol style="list-style-type: none"> a. Problem List b. Nephrology referral 2. Quality Metric Testing 3. Quality Metric Outcomes 	<p>Dialysis/Late CKD Stage-Focused Goals:</p> <ol style="list-style-type: none"> 1. Increase OP placement 2. Catheter removal within 90 days 3. Non-functioning access in ED should be diverted to OP setting
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Phase 2- 2017 Implementation

Comprehensive CKD Clinic held weekly to provide team-based care:

- Nephrologist
- Dietician
- Social Worker
- Pharmacist

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UCLA Kidney Health Program: *The Intervention: Old Model*

Pt needs urgent dialysis

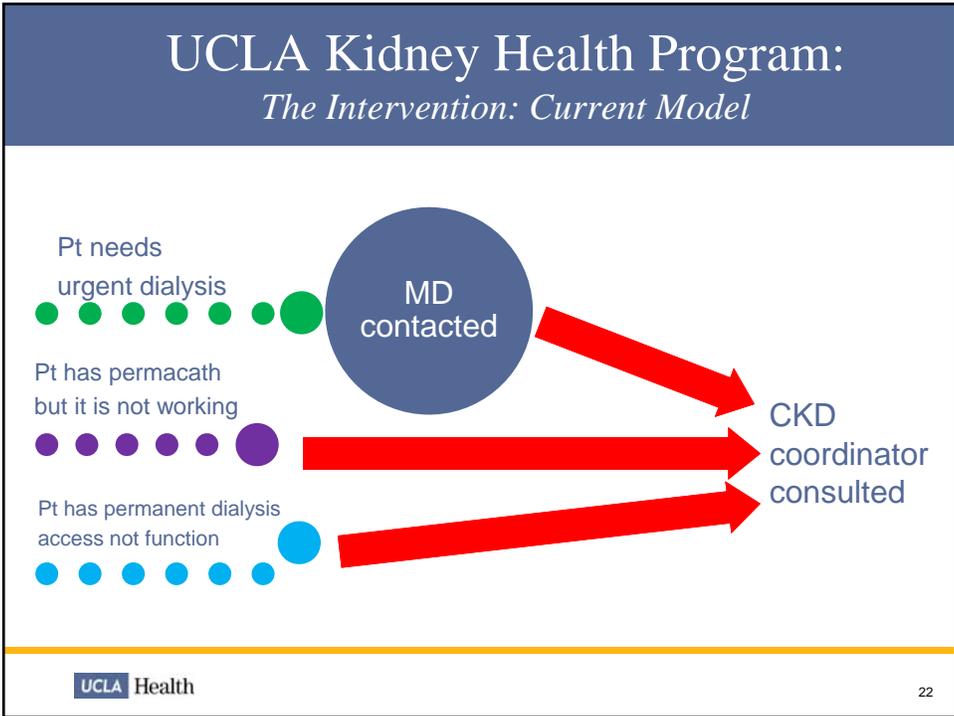
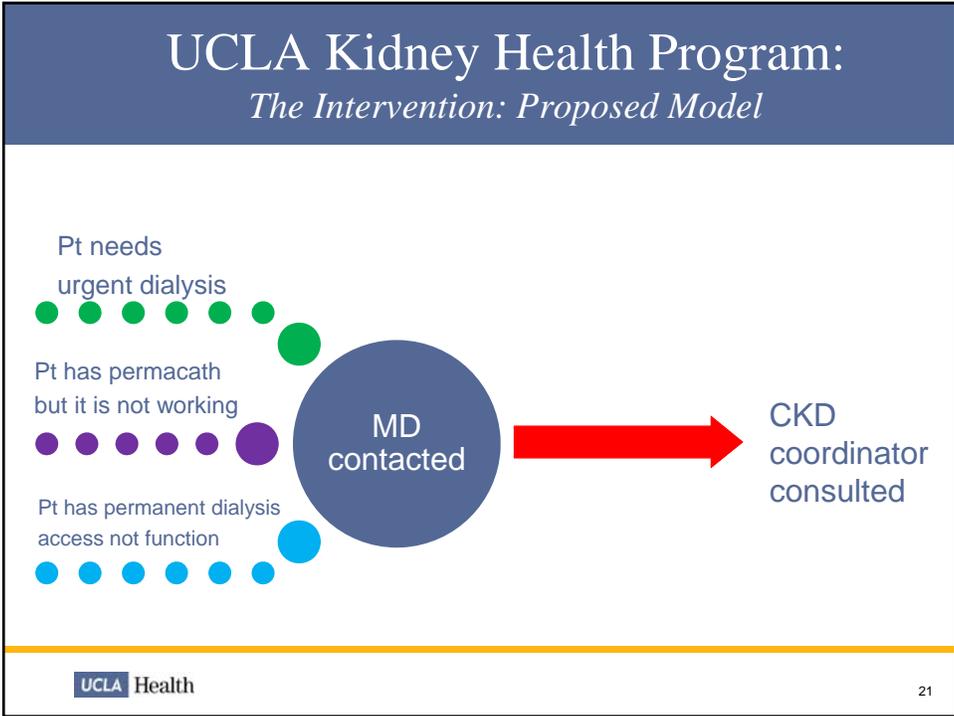
Pt has permacath but it is not working

Pt has permanent dialysis access not function

MD contacted

Pt sent to ER

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UCLA Kidney Health Program: *The Intervention*

- Custom analytics using clinical EMR data provided the QI and clinical teams with a precise dashboard to track the intervention and to identify the right patients for outreach.
- One new FTE care coordinator was hired and, to leverage shared resources, based within the Health System's 40-FTE PCMH-based coordinator program.
- Training was key → introduction to all key stakeholders, teach dialysis, share my contacts, teach how to get things done
- Location was key → immediately next to me

CKD Clinic Care Coordinator *Core Activities*

- Four Core Activities:
 - Permanent access placement
 - Permacath removal within 90 days
 - Outpatient dialysis placement
 - ED avoidance for access issues
- Initial focus on UCLA ACO population
- Process mapping was begun and expanded

CKD Clinic Care Coordinator

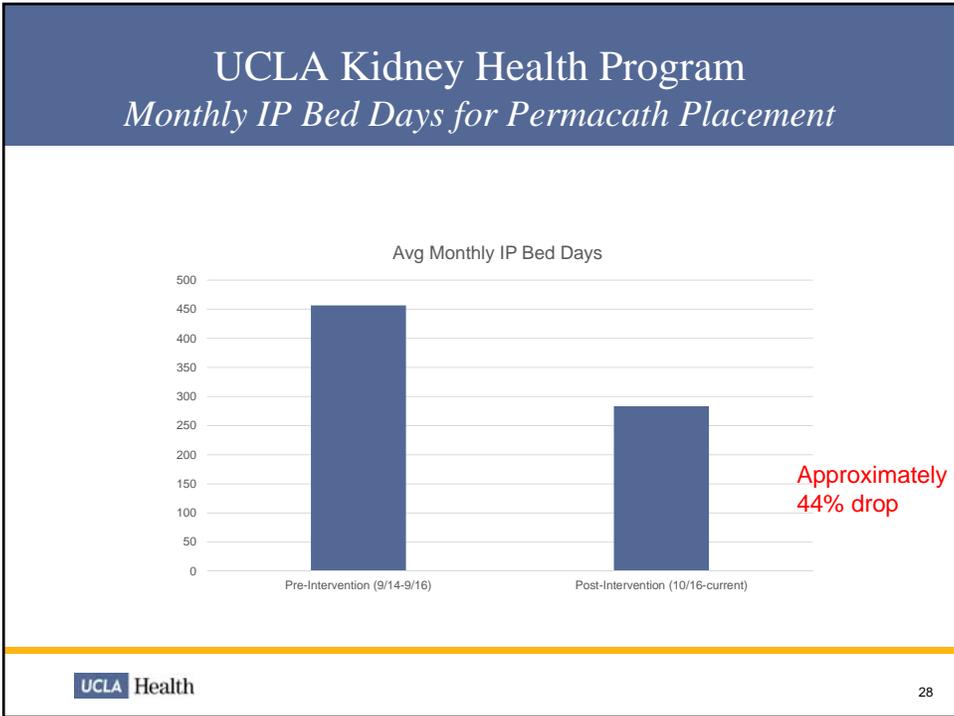
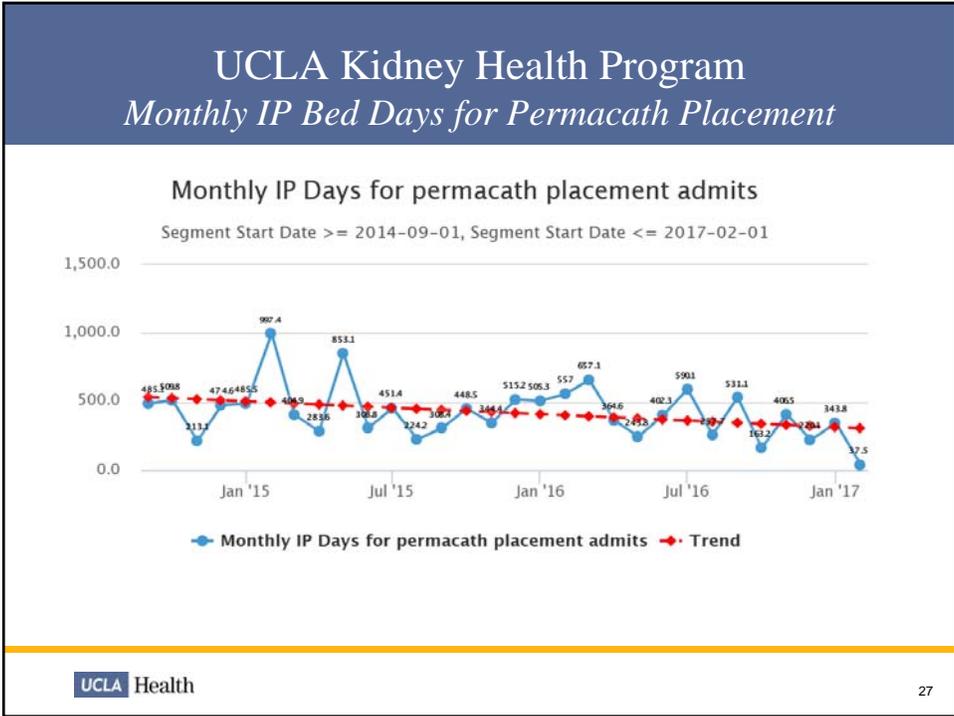
Evolving Role

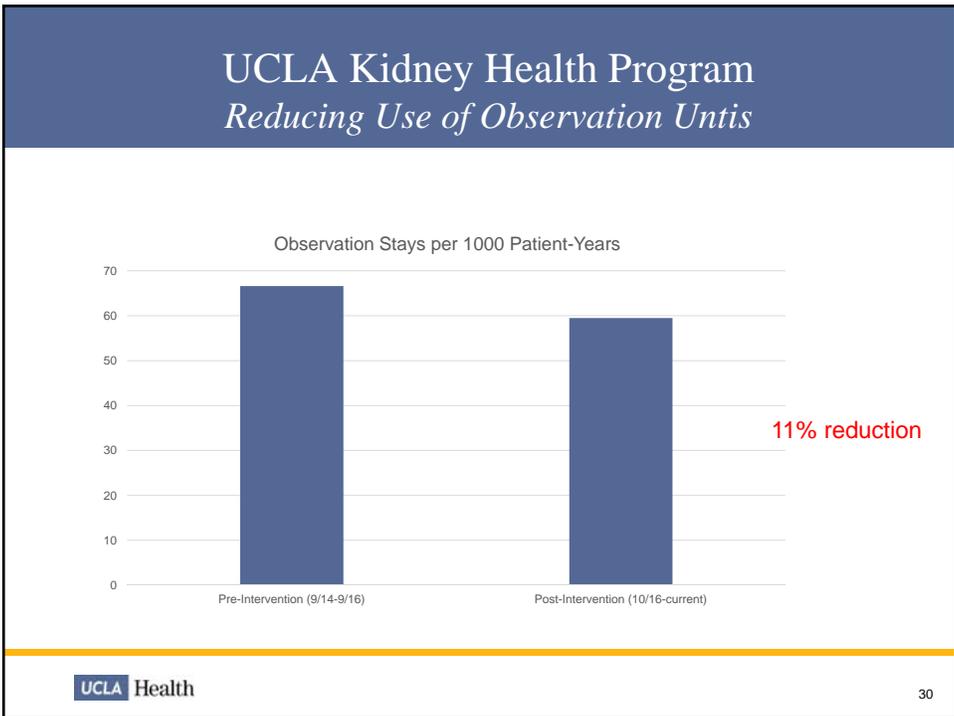
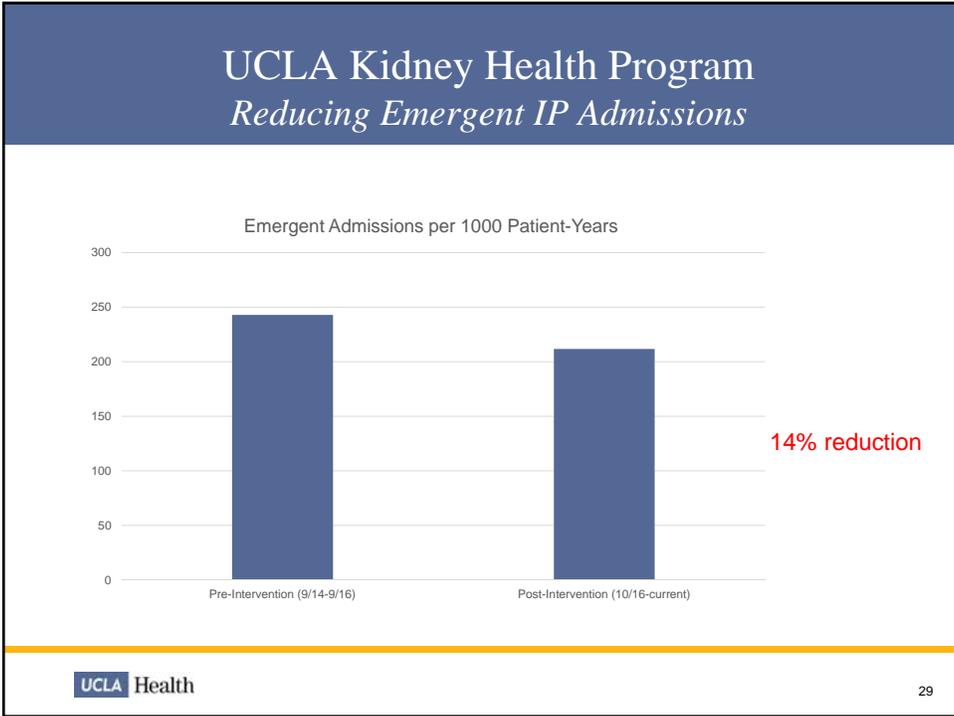
- Placing and transferring patients at outpatient dialysis facilities
- Involved in patient cases with high ED utilization
- Referring patients to receive CKD education
- Case management/follow-up on patients that have a non-functional AV fistula/graft, continue to depend on a permacath for dialysis, and require additional interventions.
- Placement of inpatient in dialysis units, including from the ICU

UCLA Kidney Health Program:

The Intervention

- Process changes were made in the interventional radiology suite to extend access for insertion of dialysis ports.
- New collaborations and communication channels were created between inpatient and ambulatory care coordination/case management targeted to the CKD and dialysis population's needs.
- All outpatient access centers located, including non-UCLA center in the community
- New access center opened in Santa Monica
- New collaborations made possible because all the team members have "been to war" together
- The overall goal was improving quality and reducing waste





UCLA Kidney Health Program *Health Plan Facility Payment Savings*

1- Year Financial Results: \$8.2 million in health plan facility payment savings

Year	Total Bed Days for Permacath Placement Admissions*	Total Facility Payment Savings Compared to Baseline
2015 (Baseline)	5,623	N/A
2016	4,728	(5,623-4,728) x \$9,187** = \$8.2 million


*Based upon all populations, not just for those in Accountable Care programs
**Modeled from Example Surgical Allowed/Day for Commercial Plan. Actual Paid Varies By Plan ₃₁ (e.g. Medicare pays by DRG). Additional savings from professional & direct costs not included.

UCLA Kidney Health Program *Impact*

- In the first 3 months of the redesign system (with the care coordinator FTE and the IR suite access changes), approximately 1100 bed-days for the UCLA ACO population have been eliminated for emergent dialysis.
- Over the preceding 2 years, emergent dialysis for these patients resulted in a monthly average of 435 bed-days this decreased to an average of 70


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UCLA Kidney Health Program

Impact

- Placement of patient from the ICU (hours from impossible)
- Time from catheter placement → permanent access → catheter out (goal is 90days):
 - ✓ has dropped 80%
 - ✓ from 212days to 44.4days

UCLA Kidney Health Program

Impact

- Program has reduced the time patient have a permacath
- This theoretically will reduce admissions for morbidity and subsequent mortality associated with permacath
- Changes in incidence rates of endocarditis, sepsis, CLASPI, replacement/repair of permacaths will be assessed in the coming months

UCLA Kidney Health Program: *Managing Adoption and Sustainability*

- Physician champions:
 - ✓ our physician champions truly and meaningfully lead the program; as opposed the model of receiving top-down project management
 - ✓ leaders in each specialty meet frequently and defined what the CKD project should work on and define the clinician-friendly intervention
 - ✓ sold the redesign to their specialty colleagues

UCLA Kidney Health Program: *Managing Adoption and Sustainability*

- Idea came from the ground up:
 - ✓ this intervention (with the idea coming from the ground-up) delivered the best care for the patient, swifter treatment and avoided hospitalizations, while solving care coordination pain points for different clinical teams.
- Integrating the new CCC into an established team with consistent workflows resulted in swift orientation and ongoing sustainability
- Process measurement dashboard is updated and reviewed monthly by the team to ensure no slip in performance.

UCLA Kidney Health Program *Challenges*

- As a second challenge, at the project outset, the improvement team did not have the data that defined the target population and the nature of the quality/utilization problem
- Through partnership between an informatics team, novel custom metrics were created that justified the QI resources and allowed for anticipatory identification of at-risk patients.
- A last challenge was the funding of the new FTE care coordinator position; while the clinical care for the CKD population occurred at the nexus of the hospital and ambulatory system, this new position was funded by the ACO in anticipation of shared savings.

UCLA Kidney Health Program *Challenges*

- We have needed to overcome several challenges in shifting from a reactive system responding to hospitalizations and ED visits to an anticipatory population health programmatic approach.
- CKD patients use services across the continuum; particularly, as nearing dialysis, managing these patients requires coordination between previously disjointed sites of care including primary care, medical specialists, proceduralists, imaging, laboratory, social work, case management.
- A centralized project management and leadership infrastructure helped organize these teams around a shared vision and regular meetings.

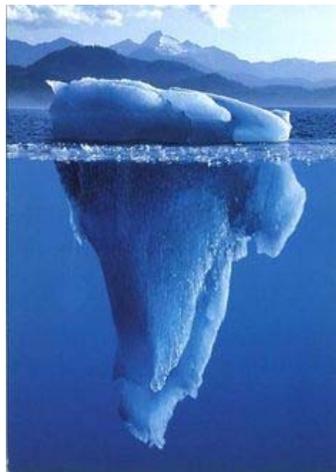
UCLA Kidney Health Program

Conclusion

- Scaling population health care redesign is possible with a balance of centralizing certain infrastructure (project management, informatics, care coordination) with condition-specific adaptation.
- Precise information is necessary for successful redesign. Health system leaders, operations leads, and clinicians are inundated with ideas for new projects and with maintaining ongoing projects.
- Analytics customized to the targeted question can harness engagement more quickly and sustained improvements over time.

UCLA Kidney Health Program

Conclusion



- Patients on dialysis or needing dialysis (11%)

- CKD not on dialysis (inpt and outpt)
 - ✓ Assessing for CKD
 - ✓ Diagnosing complications of CKD
 - ✓ Treating complications of CKD
- Inpatients on internment dialysis
 - ✓ 1700cases/mo
- Inpatients on continuous renal replacement therapy
 - ✓ 750 days/mo

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Lifeline for a Lifeline

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Q & A

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