



1. Project Title

- Driving Towards Value-Based Care: UC Davis Health's Journey along the Population Health (Healthy Planet) Trail

2. Submitter's name, title, and contact information

- Name: Ryan D. Peck
- Title: IT Manager, Epic Population Health & Government Programs
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3. Name of Project Leader(s) and team members

- Project Leads:
 - i. IT Population Health Manager: Ryan D. Peck
 - ii. Population Health MD Champions: Dr. Chris Lillis, Dr. Scott MacDonald, Dr. Michael Hooper
 - iii. Operational Champions: Mike Condrin, BJ Lagunday, and Ally Schlofner
- Team Members:
 - i. Jeffrey Berg, Jodi Nygaard, Troy Peterson

4. Simple Short Statement summarizing what the project does

- This project, Installing Epic Population Health (referred to as Healthy Planet) Technology tools, focused on bringing the people, process, and technology tools together to position UC Davis Health as a leader in Value-Based HealthCare Delivery as described in Michael Porter's book *Redefining HealthCare*. The technology toolkit that was deployed included 50+ Epic-based Registries (wellness/chronic disease/risk contracts), physician and practice manager performance dashboards in Epic with 31 quality metrics (actionable data), risk stratification and predictive analytics tools, high-risk case management workflows, bulk ordering/communication workflows, and many other tools to drive towards Value-Based care. The technology toolkit empowers executives, practice managers, and providers to understand care gaps quickly and take-action in an efficient manner (within the same application) to improve patient outcomes, lower the cost of care, and improve provider satisfaction.

5. A project narrative that:

- **Describes the problem being solved and project goals**
 - i. Problem being solved essentially that the healthcare marketplace is rapidly transitioning away from fee-for-service payment models to value-based payment models. The way to solve this problem is to standup a comprehensive population health program that includes the technology to work efficiently to improve population health and value for our patients. At UC Davis Health, the business drivers specifically impacting the future financial position were:
 1. Value-based care contracts in place
 2. Medicaid Section 1115 Waiver (Public Hospital Redesign and Incentives in Medi-Cal Program)
 3. Medicare Shared Savings Program (MSSP) Track 1



4. Local Northern California Employer Groups and Patients focus on Value in the Marketplace
5. New forms of competition emerging in Sacramento

ii. Project Goals:

1. Improve Quality Metrics and Patient Outcomes
 2. Lower Total Cost of Care
 3. Improve Patient and Provider Satisfaction
 4. Leverage technology to empower providers to work efficiently at scale and improve overall health for UC Davis Active Patient Population (~430k patients seen in last 3 years)
- **Emphasizes the solution and innovation, rather than technical detail**
 - i. Solution: Deployed a robust technology toolkit that empowered Doctors, Nurses, and Pre-Visit Planners with actionable insight into their patient panels, practices, and UC Davis Health as whole to understand care gaps. The people, process, and technology empowered providers to take action in bulk to identify care gaps, engage patients electronically in their health care gaps and encourage office-visits, etc. The innovation leveraged cutting-edge population health tools from Epic, such as Epic Machine Learning Models (i.e. predictive analytics) to risk stratify patient populations, and overall the program resulted in significantly improved quality scores after go-live of the tools.
 - **Tells how the solution has impacted customers**
 - i. The solution significantly improved patient quality metrics (UC Davis Active Patients – 430k) across several domains (wellness and chronic disease management). 21 out of 31 new quality metrics deployed in Epic improves significantly over 15 months:
 - ✓ 7 Metrics +16 to 58 percentage points
 - ✓ 14 Metrics +5 to 9 percentage points
 - **Explains how project success was measures**
 - i. The project success was measures ultimately by improved patient quality metrics and adoption of the Population Health Tools in the Primary Care Clinics at UC Davis Health.
 1. 21 out of 31 Metrics saw significant improvement
 2. Adoption of the Epic Healthy Planet (Population Health Dashboards) is high from the Primary Care Network. The “trust” is that high in the tools that the UC Davis Primary Care Compensation committee is retiring manually calculated quality metrics and the mechanism for delivery their quality scores in Adobe PDF each month to their Outlook inbox. On 7/1/19, the doctors will be directed to only use their Healthy Planet dashboard to understand their performance of incentivized metrics for their annual bonus. In other words, only one “source of truth” for performance management.



- **Highlights collaborations with other locations, department, or teams**
 - i. UCSD Population Health Team was a key collaborative partner to UC Davis Health Success. Under Dr. Amy Sitapati's leadership, she willingly partnered with UC Davis and shared her knowledge, epic build, and workflow insight on how UC Davis could structure the population health solution. Without UCSD's insight and inspiration, this project would not have been possible. A special thank you to:
 - 1. Dr. Amy Sitapati (CMIO of Population Health at UCSD), Jennifer Holland (UCSD), Barbara Berkovich (UCSD), Jeffrey Pan (UCSD), Eugene Lee (UCSD), and Jason Votaw (UCSD)

- **Provides the timeframe of deployment**
 - i. Project Kick-Off: October 2016
 - ii. Phase 1 Complete: June 2017
 - iii. Phase 2 Completed: June 2018

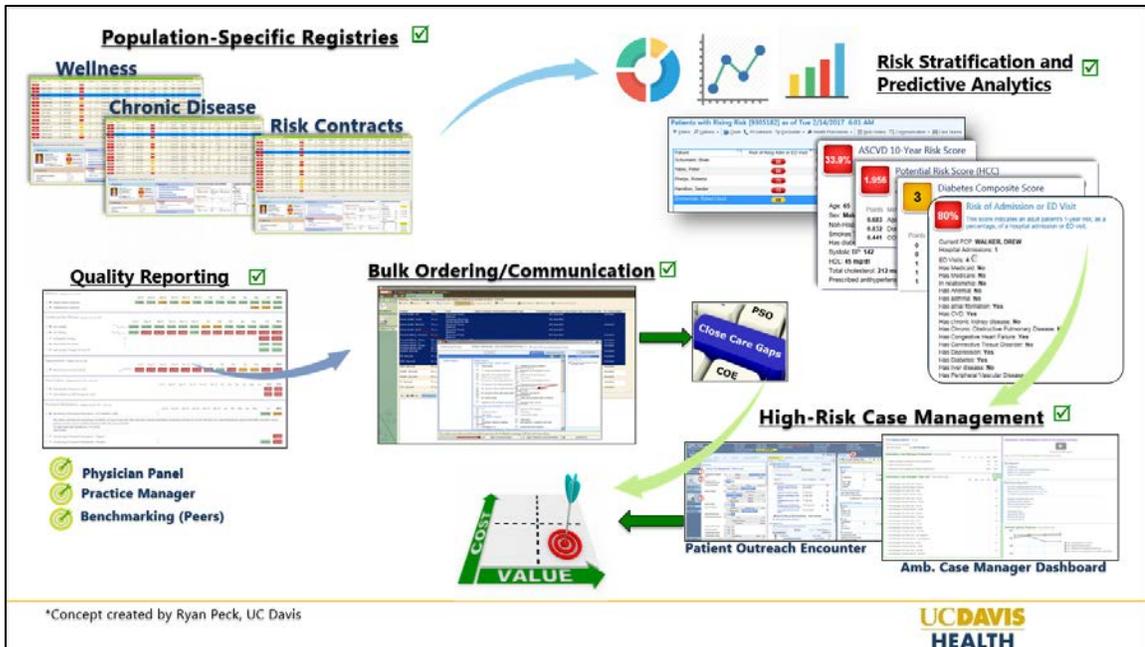
- **Briefly describes the technology utilized**
 - i. The technology utilized is under the Epic Healthy Planet Module umbrella. With Healthy Planet, integrated tools help providers monitor a patient's care over time and take action to keep patients healthy or improve chronic conditions - no matter where the patient receives care. Healthy Planet seamlessly combines analytics, clinical tools, and patients' insights to improve health for individuals and for populations

- **Optional provides relevant screenshots or urls (5-page limit)**
 - i. UC Davis Healthy Planet Presentation presented by Ryan Peck at the Epic Pop Health Summit in November 2018
 - Event:**
<https://pophealthandconnectsummitepic.com/>
 - Slides:**
<https://eventarchive.epic.com/Past%20Events/2018%20Events/Pop%20Health%20&%20Connect%20Summit/PopConn21%20Driving%20Towards%20Value-Based%20Care%20-%20Journey%20Along%20the%20Healthy%20Planet%20Trail.pdf>
 - Audio:**
<https://eventarchive.epic.com/Past%20Events/2018%20Events/Pop%20Health%20&%20Connect%20Summit/PopConn21%20Driving%20Towards%20Value-Based%20Care%20-%20Our%20Journey%20Along%20the%20Healthy%20Planet%20Trail.mp3>

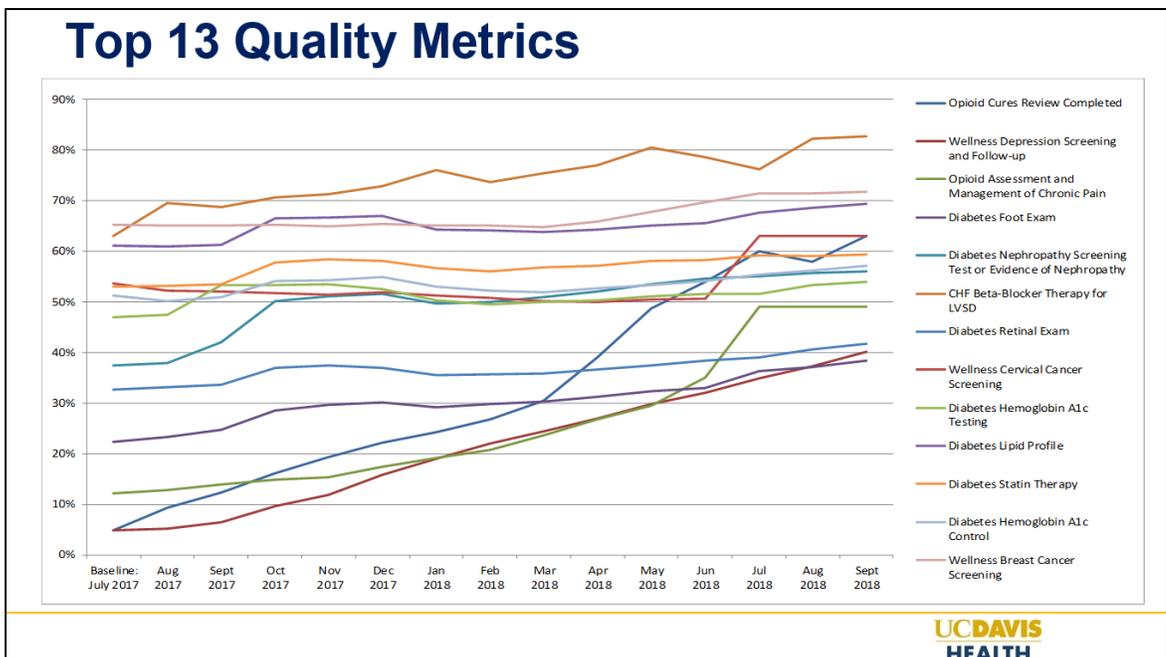
Slide excerpts on next page:



Population Health Tools Framework (tools deployed)

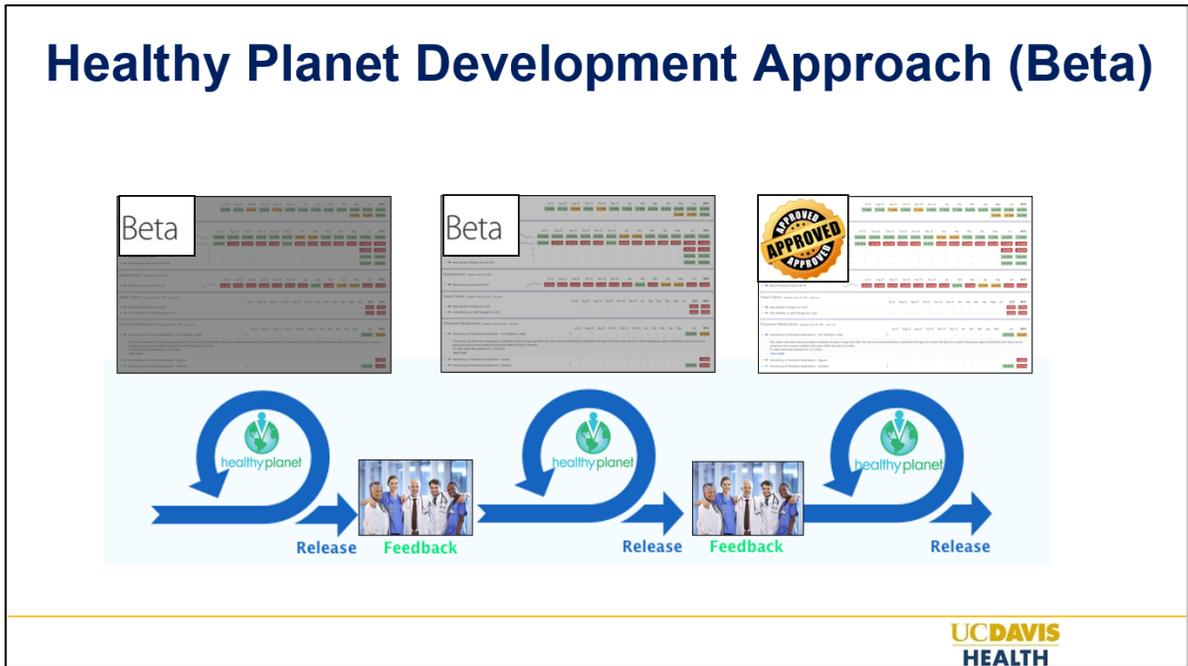


Overall Project Results – Quarter Ended 9/30/18 vs. Tech. Go-Live





UC Davis Health Project Philosophy (Agile approach to Technology Development)



UC Davis Health Population Data Analytics Vision (this project took several steps towards achieving this vision)

