

Virtual Care Solutions

Moving Care from the Hospital to the Home

Access Strategy

Revenue Strategy

Primary Care Strategy

Building onto existing infrastructure to move to the next paradigm of
healthcare delivery!

What is Virtual Care?

Technology

Tele-Health
Asynchronous Communication
Continuous Monitoring



Analytics/Data Relationships

Descriptive
Prescriptive
Predictive



Patients view the connectivity as
a relationship

What are the attributes and impact of Virtual Care?

Virtual Care Attributes

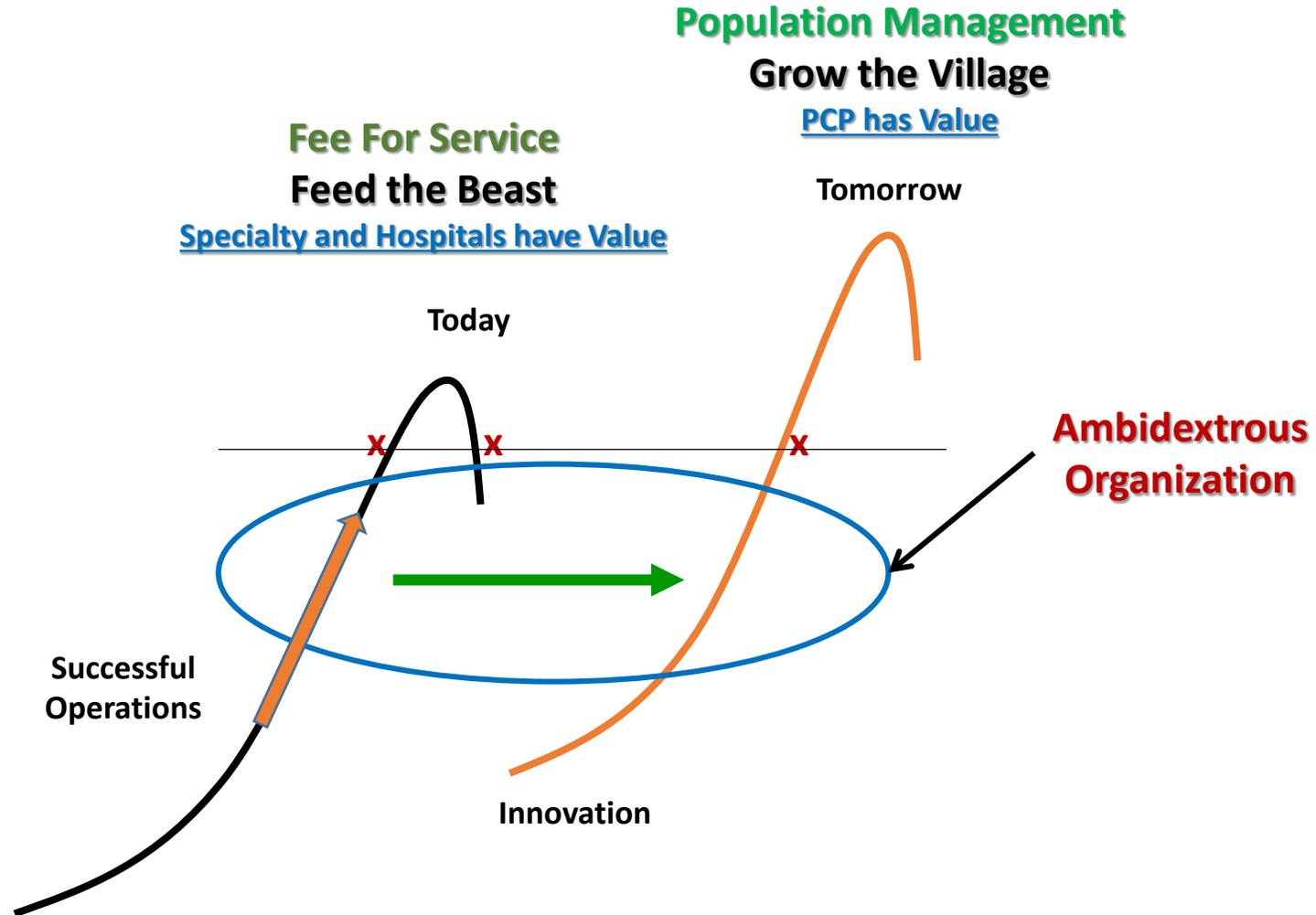
- Access – 24/7/365, synchronous & asynchronous
- Patient Engagement
- Decreased Variation
- Mobility
- Improves the efficiencies and effectiveness of clinical assets
- Changes traditional markets
- Builds from Alliances and Collaborations - scale

Care Delivery Impact

- Leverage existing Provider Networks managing larger populations
 - Increases Revenue
 - Lowers Costs
 - Improves Quality
 - Removes Market Geographic Limitations
 - Scales thru Collaborations
 - The vehicle to manage healthcare's paradigm change
- } Value!

Healthcare's Ambidextrous World

Driven by Economics



Virtual Care

Why does it work?

Hospital

- E-ICU – It is not about the superman moments

Centralization of Health Care Delivery

- Sepsis – changing the paradigm

Impacting the Critically Chronically Ill @ home

- Radically changing the cost curve

E-ICU

It is about meat and potatoes

- Implemented the e-ICU over 10 years ago @ Mercy (Visicu platform)
 - Impact: 40% decrease in mortality and a 35% decrease in LOS as compared to APACHE base line expectations (severity adjusted)
- What did we learn
 - Two way video increased staff compliance with recommendations by 60%
 - The biggest impacts were derived from monitoring compliance with known standards and bundles of care, overlooked or under appreciated alerts, work load balancing – computer aided decision support
 - Nurse Mentoring
 - Virtual Care responds positively to scale
 - Virtual Care is an augmentation strategy, not a replacement strategy

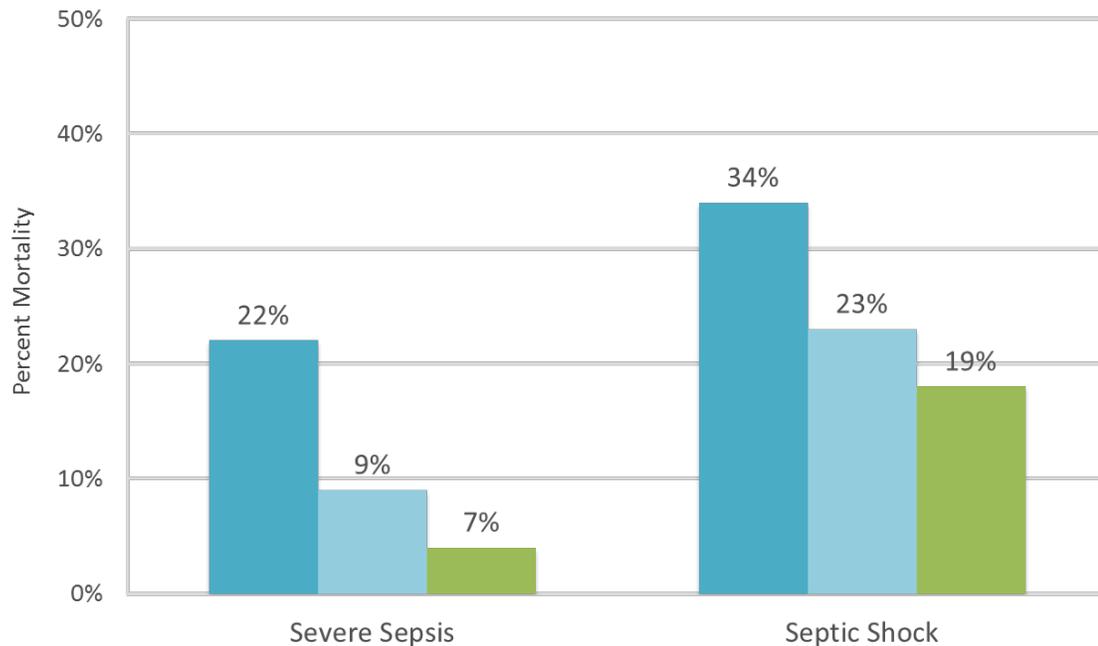
E-ICU

It is about meat and potatoes

- How can you apply what was learned to the inpatient population
 - 24/7 monitoring of all acute patients – mobile biometrics
 - Virtual sitting for agitated and/or confused patients
 - ED support
 - Tele - stroke
 - Virtual ED physician to support NP's in the Rural ED's (also supports the rural PCP network)
 - Psych triage and Psychiatry consultative services removing the Behavioral Health Bottle Neck
 - Convert critically ill patients to e-ICU support during ED event in transition to either admission or transfer.
 - Virtualize difficult specialty consultations, that physician or specialty that never responds in a timely fashion
 - PCP Kiosks for less than severe ED cases
 - Observation Units – virtualize the transition patients waiting on discharge to home or admission decisions
 - PCP rounding on patients with hospitalizations predicted to be greater than 2days
 - Support networks of facilities with specialty consultations

Sepsis – development of the Virtual Care Impact Paradigm

Centralization of Health Care Delivery



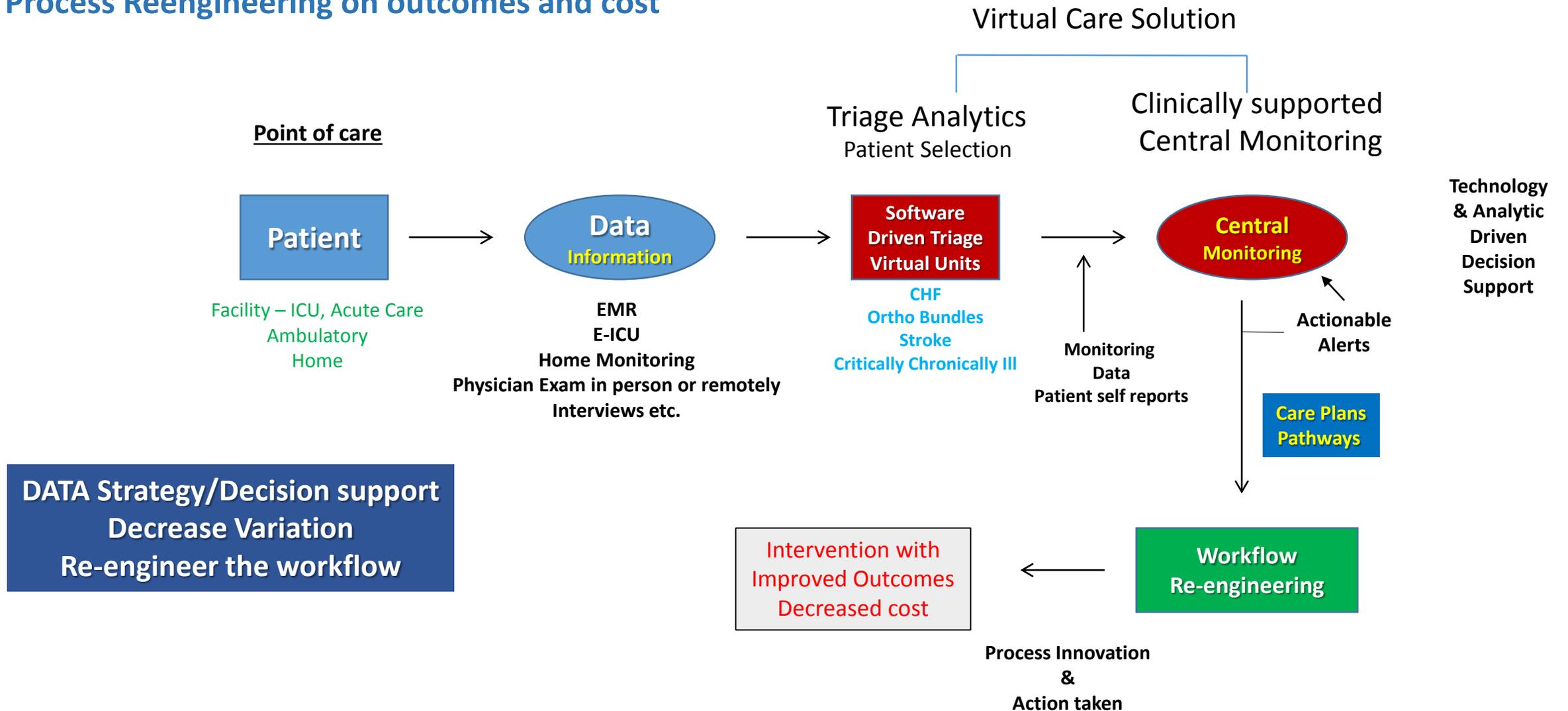
70 % reduction in Mortality
in Patients with Severe Sepsis

45 % reduction in Mortality
in Patients with Septic Shock

95 % reduction in patients moving
from severe sepsis to septic shock

Virtual Care Impact Paradigm

The Power of Central Monitoring Analytics & Process Reengineering on outcomes and cost



Virtual Care Command Center

DATA Strategy/Decision support
Decrease Variation
Re-engineer the workflow

- What did we learn
 - Centralization decreases variation
 - Need to re-engineer the workflow
 - Data from all sources creates the opportunities
- How can you apply to the inpatient population
 - Sepsis programs in all facilities in the acute setting and post acute settings (right into the home)
 - Post surgical lab monitoring (glucose)
 - Pain Medication monitoring for hypercapnia
 - More intense monitoring of at risk patients in a number of diseases
 - Cardiovascular
 - COPD

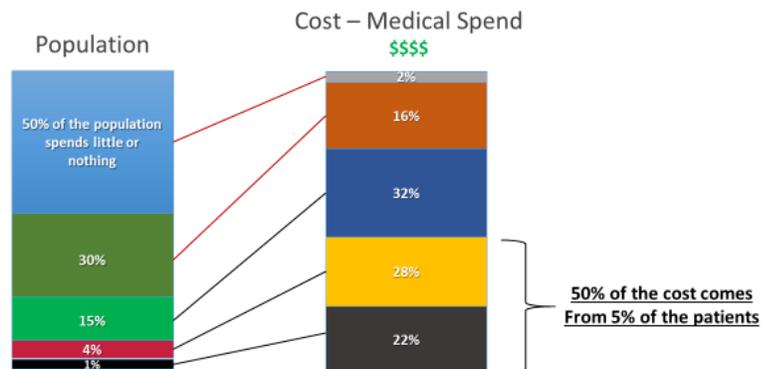
Virtual Concierge's

Go Where the Money Is

Impacting the Critically Chronically Ill @ home

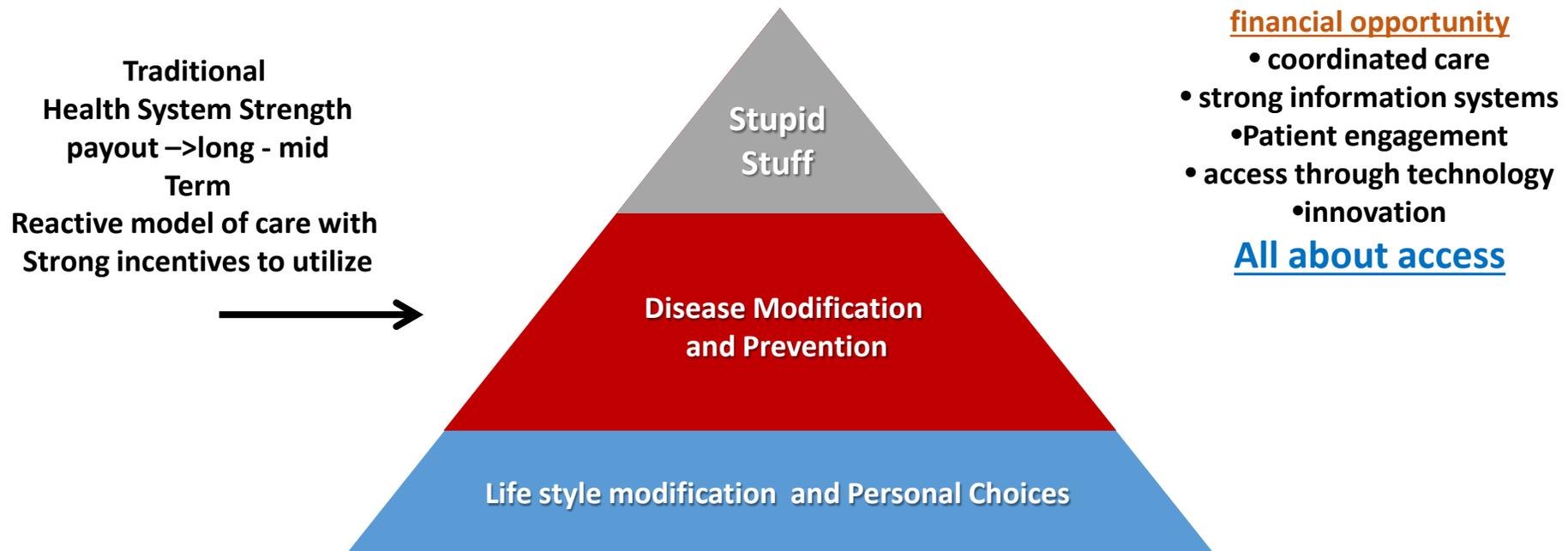
- Implemented a virtual concierge's model for the most frail and at risk patients within an MA risk model contract.

Based upon healthcare's unique cost curve with the Top 5% of Ambulatory Critically, Chronically Ill patients representing ~50% of the total costs, a highly targeted Virtual Care Solution can drive substantial savings



- Multi Disciplinary Team
 - Physician – APN – Social Workers – Coaches – Navigators
- Bluetooth enabled monitoring kit with an I-Pad
- 24/7/365 access for patients and families
- Platform with video, asynchronous communication tools patient engagement, decision support, full patient data integration and AI

Healthcare Economics in the USA



Very difficult to do with payout → long term

Very few financial incentives to create models that support changes

Virtual Concierge's

Go Where the Money Is

Impacting the Critically
Chronically Ill @ home

- What did we learn
 - Access to care decreases stupid stuff
 - Patients view this connectivity as a relationship – 95% retention over > 200,000 enrollee member months
 - The elderly can manage technology if it is designed properly
 - Once again – Meat and Potatoes and decreased variation apply
 - One hub can manage 500 CCI patients

60 % decrease in enrollees resource utilization/cost

Population impact

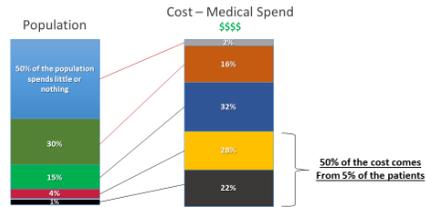
\$22 PMPM cost of the program

\$112 PMPM savings

Where is the sweet spot?

Leveraging VCS to Reduce Costs for the Top 5%

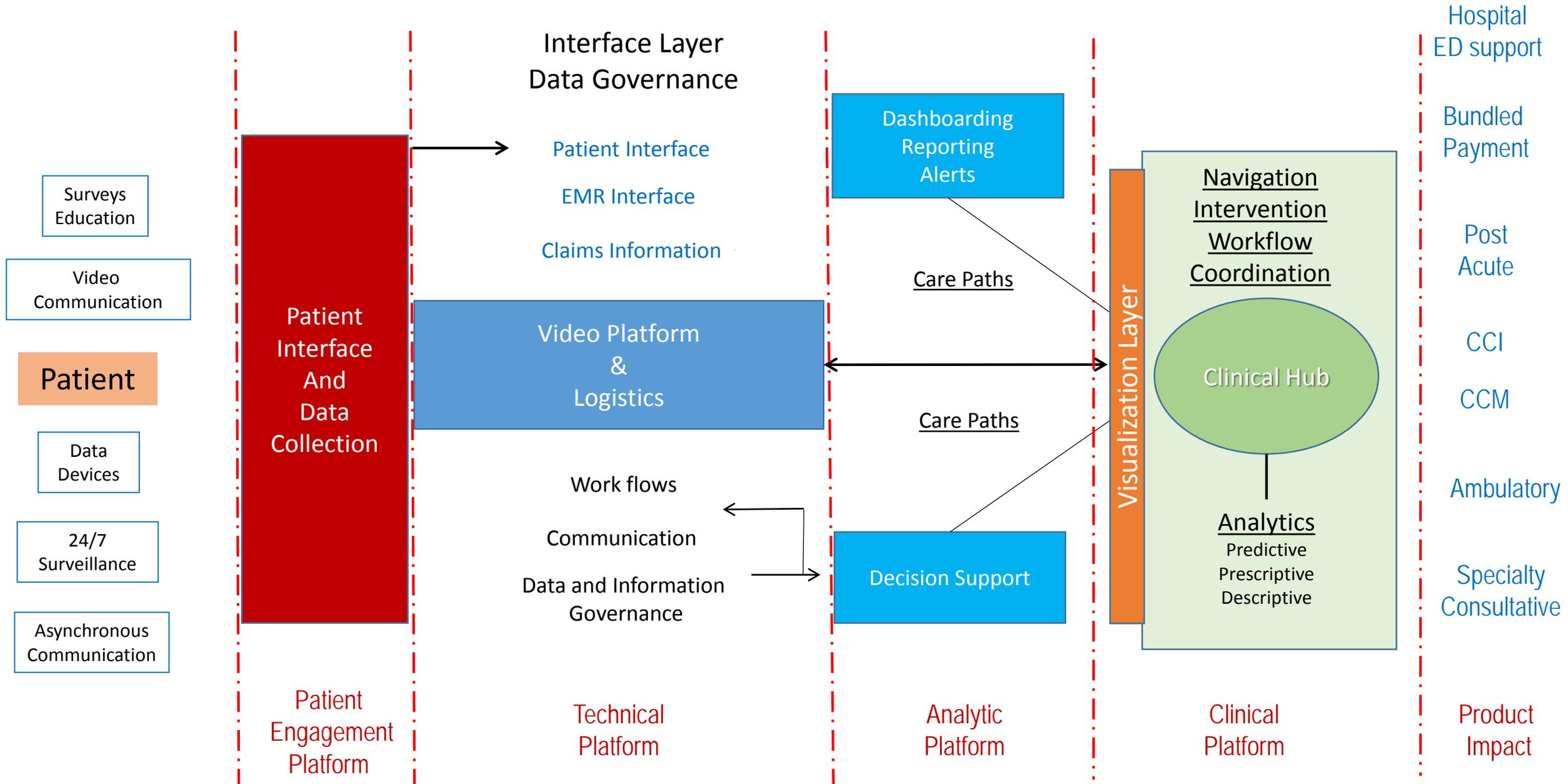
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1 HUB	Statistics of 1 hub
Patients	500
Medicare Population	57,142
Med Advantage Pop	20,000
Total Cost	\$5,100,000
Revenue per Hub	\$26,950,000
Net per Hub	\$21,800,000
System Size	1 billion in revenue

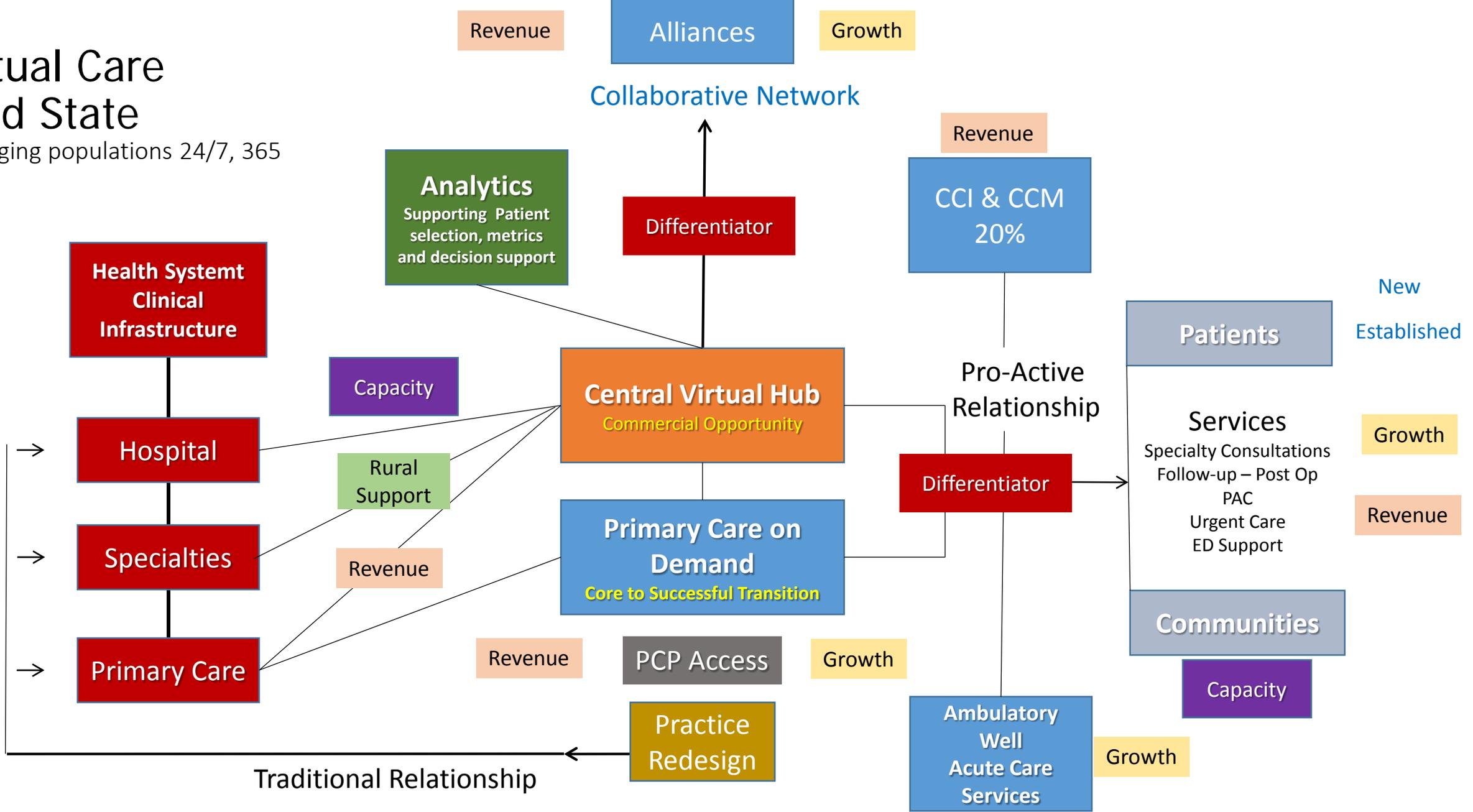
Medicare Advantage Population	20,000 patients	Cost PEPM	PMPM cost to provide service	Cost with 100% participation	Savings @ 60%	Revenue Return	Savings @ 30%	Revenue Return
22% of the spend	200	\$950.00	\$9.50	\$2,280,000	\$23,760,000	10.42	\$11,880,000	5.21
28% of the spend	800	\$750.00	\$37.50	\$7,200,000	\$30,240,000	4.20	\$15,120,000	2.10
32% of the spend	3,000	\$350.00	\$52.50	\$12,600,000	\$34,560,000	2.74	\$17,280,000	1.37
16% of the spend	6,000	\$100.00	\$30.00	\$7,200,000	\$17,280,000	2.40	\$8,640,000	1.20
2% of the spend	10,000	\$10.00	\$5.00	\$1,200,000	\$2,160,000	1.80	\$2,700,000	0.90

Virtual Care Platform



Virtual Care End State

managing populations 24/7, 365



Virtual Care

- Virtual Care is not tele-vision medicine – it is a multi dimensional, innovative approach to care delivery.
- Virtual Care is a network strategy with many components crossing the entire continuum of care delivery.
- Virtual Care is a “grow the village strategy” (not FFS friendly) but will allow health systems, physicians and payors to evolve to the new paradigm in a sound economic fashion.
- Virtual Care is an augmentation to the existing infrastructure, not a replacement.

Technology – Data - Relationships