



Sharp HealthCare

Information Technology Strategy

May 9, 2017

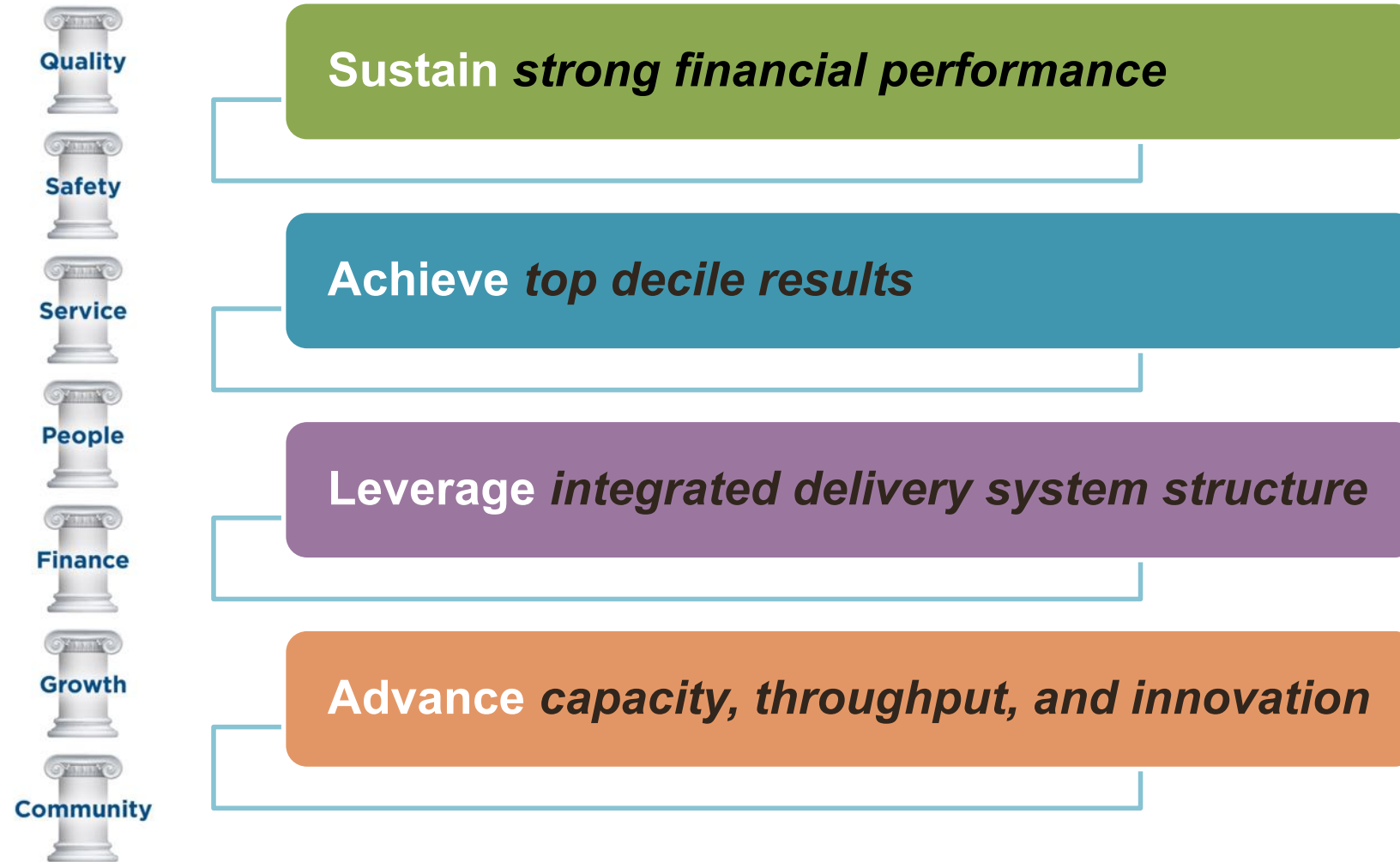


Sharp HealthCare



- Not-for-profit serving 3.2 million residents of San Diego County
- Grew from one hospital in 1955 to an integrated health care delivery system
 - 7 Hospitals, 2 Medical Groups, Health Plan
 - Integrated information technology systems
 - Centralized system support services
 - Largest health care system in San Diego with highest market share
- Largest private employer in San Diego
 - 17,000 employees, 2,600 affiliated physicians, 3,000 volunteers

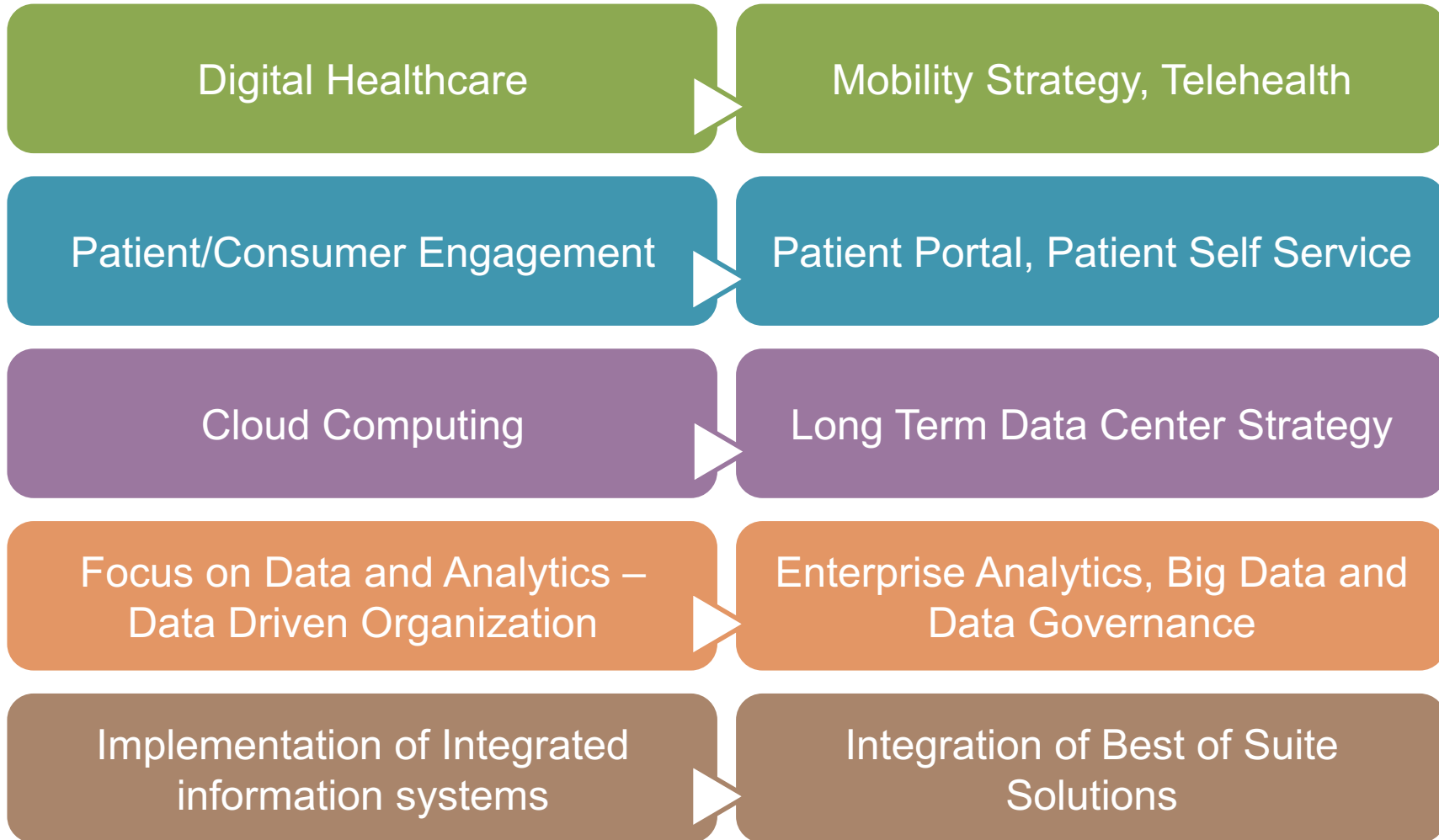
Sharp HealthCare Strategic Priorities



The Healthcare Technology Curve

Industry Trend

Sharp HealthCare



Sharp HealthCare IT Overview

- Cerner Millennium Acute EMR
 - Full EMR implementation across all Hospitals
 - Emergency Department, Pharmacy, Surgery, Radiology, Lab and other applications
- Allscripts Touchworks Ambulatory EMR
 - Sharp Rees Stealy (SRS) Foundation Medical Group - On Premise for 550 providers
 - Sharp Community Medical Group (SCMG) IPA – Dell Hosted with 200 Providers
- GE Centricity Registration and Revenue Cycle across all Hospitals and SRS
- Allscripts Practice Management at SCMG
- Cerner Millennium Ambulatory EMR Implementation
 - Hospital based outpatient Behavioral and other clinics implemented as first sites
 - SCMG IPA and SharpCare implementation underway
- Follow My Health Patient Portal with nearly 200,000 users
- Infor/Lawson Enterprise Resource Planning
 - General Ledger, AP, Materials, Payroll, HR
- Private HIE across Sharp using Allscripts dbMotion Platform
- Connection to San Diego Health Connect as San Diego Community HIE

IT Strategic Priorities



Sustain *strong organizational and technology compliance and infrastructure*

- Implement IT Risk Management program
- Execute long term data center strategy
- Maintain regulatory compliance
- Implement vendor and application portfolio management
- Support infrastructure and facility modernization
- Enhance IS staff development and retention
- Enhance communications, education and support for IT processes and application

Sustain
strong organizational performance

Long Term Data Center Strategy

- Look to get out of data center business
- Completed buildout of secondary data center and testing fail over of system
- Evaluating regional colocation providers as new primary data center
- Evaluating remote hosting of applications such as Cerner
- Evaluating movement to cloud
- Anticipate hybrid environment



Achieve *top decile results* though strong core clinical and financial systems

- Develop and implement communication and alerting technology
- Implement assistive technologies in support of HRO and high risk workflow
- Implement image life cycle management
- Implement advanced documentation systems
- Continue to optimize existing systems

Achieve
top decile results

Clinician Communication

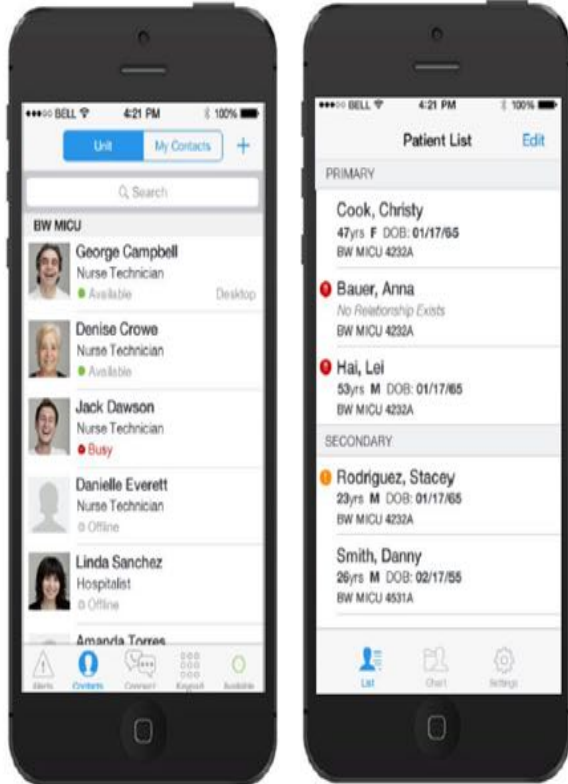
CareAware Connect for Clinicians

Care Team Collaboration



Assignments Provide Accuracy of Routing Communications, Alerts

- Caregivers assigned to each patient throughout their stay
- Real-Time access to assigned patient lists with new task indicators that trigger mobile workflows



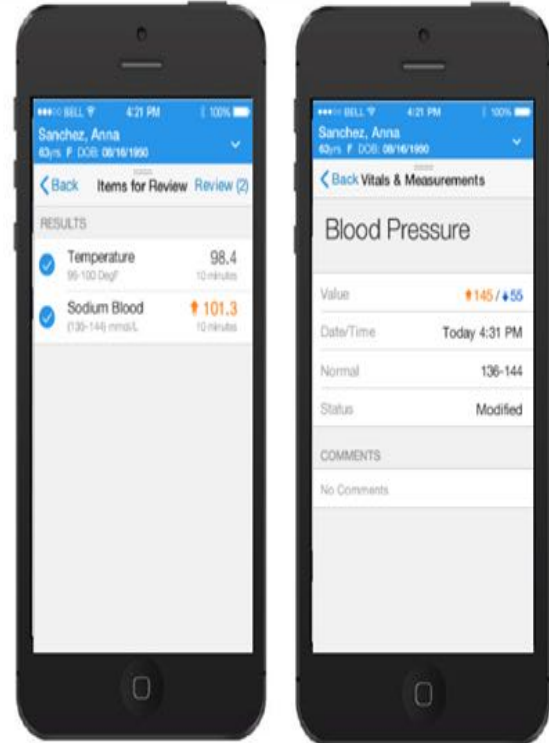
CareAware Connect for Clinicians

Clinical Integration



Clinical Review, Point of Care, Documentation Workflows

- Real-Time access to critical patient medical record information
- Items for Review (New Orders and Abnormal Results)



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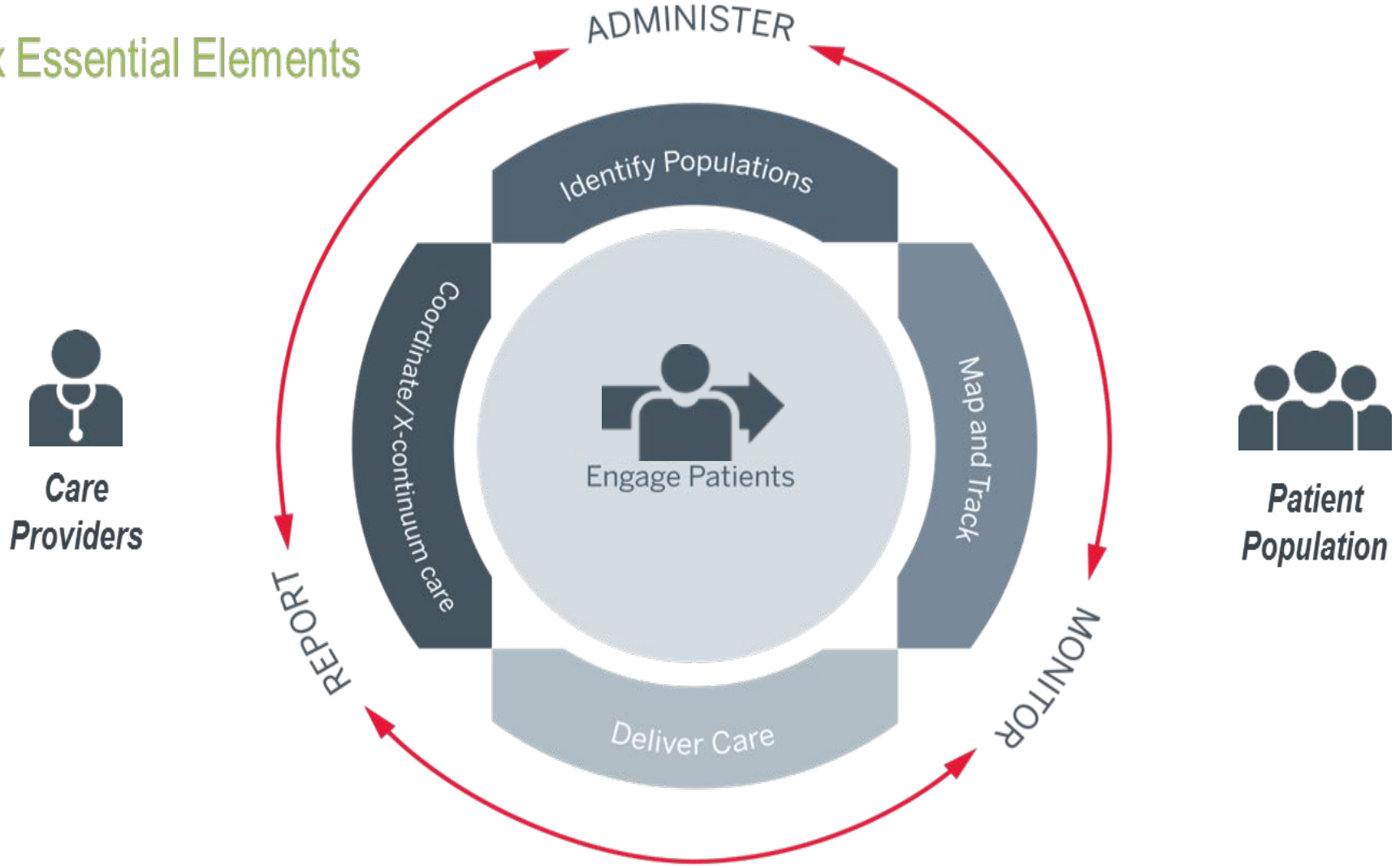
Leverage *advanced technologies to support population health and integrated delivery system*

- Implement population health solutions
- Evolve advanced analytics and big data
- Implement new technology to support Sharp Health Plan
- Implement enterprise data management and governance program

Leverage
advanced technologies to support ...

Framework for IT-Enabled Population Management

Six Essential Elements



Five Areas of Focus for Data & Analytics

Effectiveness



Knowledge Management

- Enable knowledge-based decision making throughout the health system to improve efficiency, effectiveness and quality
- Extend data and information tools across the organization (i.e., dashboards, data marts, third party knowledge systems)



Advanced Informatics & Data Mining

- Expand informatics resources and the ability/capacity to develop new knowledge
- Implement tools to analyze large data volumes and varied data types (e.g., Natural Language Processors)



“Big Data”

- Continuum of care focused
- Drive toward efficiencies and cost reduction
- Aggregate & organize very large data sets
- Integrate a broad range of data sources to include hospital, ambulatory, patient generated, payer, genomics, pharma etc.

Innovation



Predictive Modeling

- Advanced rules that identify patterns and risk score patients
- Identify early intervention opportunities and alert care teams within their workflow
- Analyze patient populations to identify complex trends to inform wellness programs, health plan product development, clinical program planning, etc



Precision Medicine

- Personalized management of health and wellness (integrate clinical data with wellness tracking tools)
- Continuous monitoring of targeted patients to track indicators and trigger interventions
- Personalized medicine combining genomics and clinical data to develop individualized treatment plans

Advance *growth and capacity* through *innovative technology*

- Support Oncology service line with IT plan including precision medicine
- Implement systems to enhance physician alignment
- Implement CRM strategy and technology
- Develop and implement digital strategy to engage consumers through enhanced services
- Expand technology solutions to improve access to Sharp services
- Promote a culture of innovation

Advance
growth and capacity

Drivers for Mobility

- Improves efficiency with portable use
- Facilitates a more streamlined workflow for care transitions
- Extends real-time information to support personal lifestyles
- Helps retain and recruit tech savvy physicians, clinicians, leaders and staff
- Meets consumer expectations of market trends



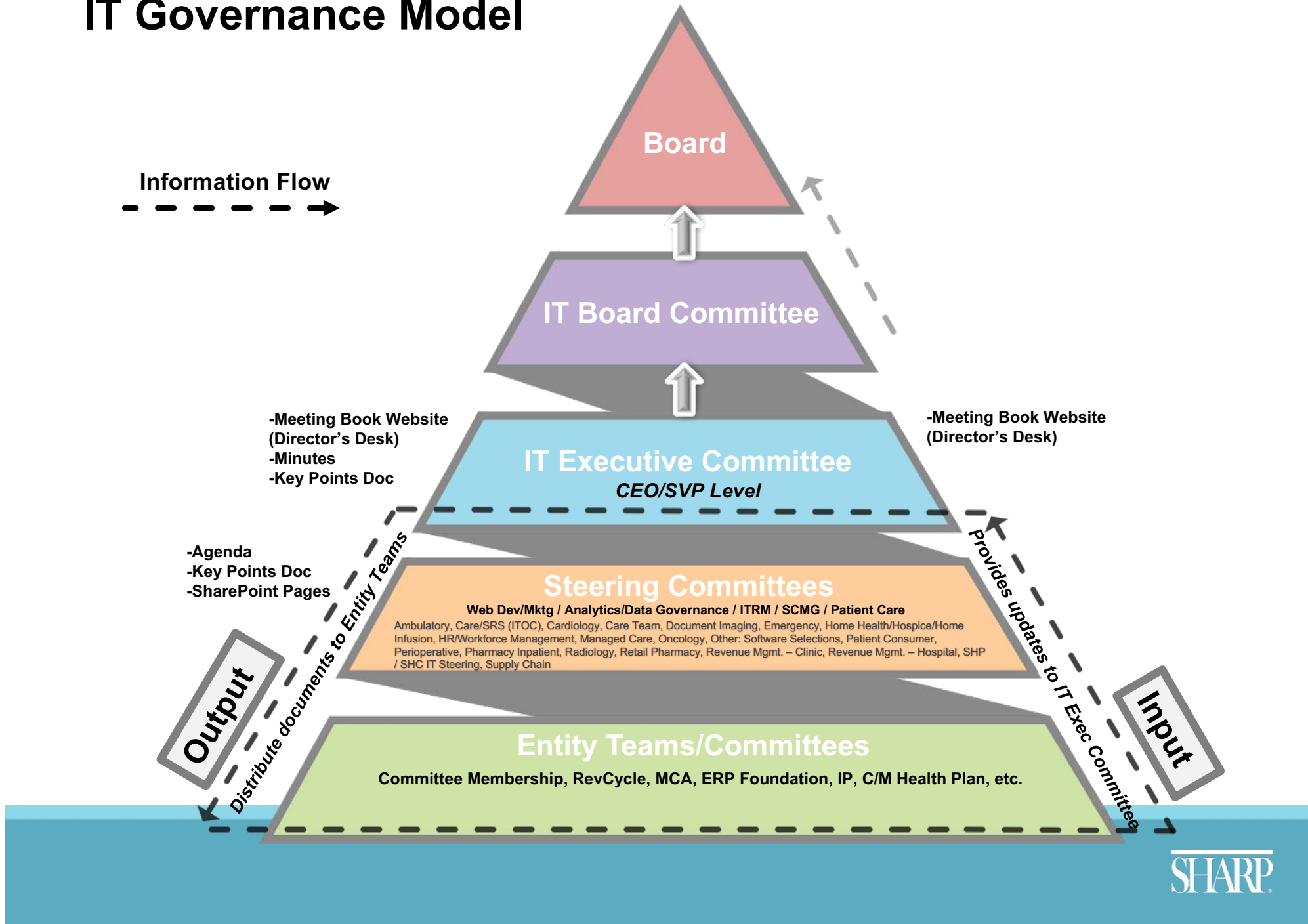
Telehealth Drivers

- Improving access to services for consumers
- Extending highly skilled resources
- Extending Sharp services to more customers
- Supporting population health patient monitoring
- Improve efficiencies of staff
- Reduce cost of care
- Meets consumer expectations of market trends



IT Governance Model

Information Flow
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Questions
