Rady Children's Digital Journey
Episode 8 (2024)

Albert Oriol
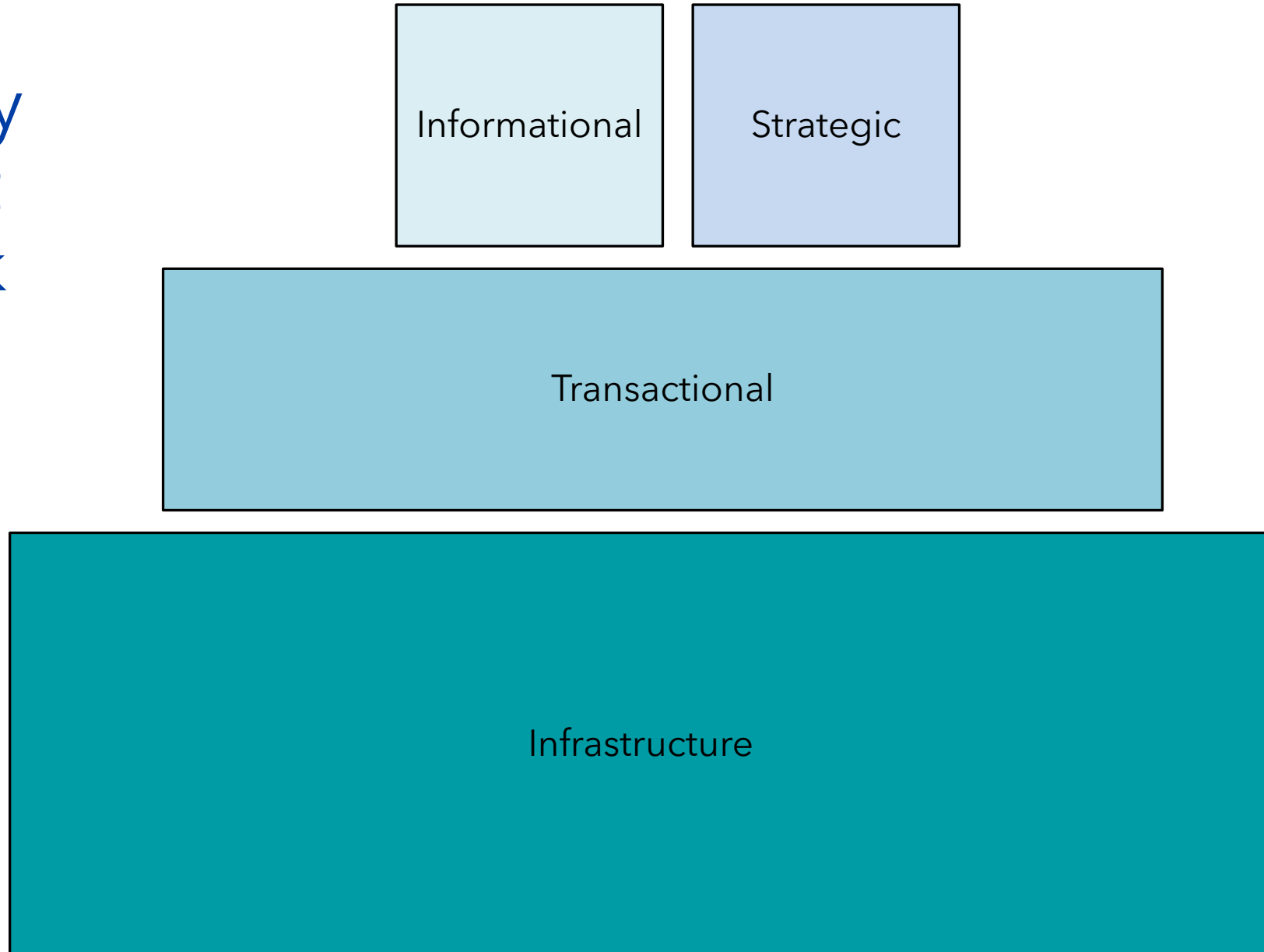
About Rady Children's

Fast Facts FY2023

Beds:	515
Revenue:	$1.5B
Capitated Lives:	250,000+
Employees:	6,000
Physicians:	800+ affiliated
	400+ subspecialists
Nurses:	1,500+
Admissions:	17,000+
Surgeries:	17,000+
ED and UC Visits:	136,000+
Outpatient Specialty Visits:	280,000+
Outpatient PCP Visits:	470,000+

Region's provider of choice and safety net

Technology Investment Framework

Informational

Strategic

Transactional

Infrastructure

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Telemedicine

Why it matters

No longer "leading edge", now a "must have"

Patient convenience

Lower cost care

Extends geographic expansion

Extends MD career options

Our Foundation

Zoom-Epic integration

~10% of outpatient volume

What we need

Peripheral device integration

Multi-State licensure

Continued payment parity

Continued training / optimization

Chatbots

Why it matters

Faster access / timely response

Personalization and timeliness leads to patient satisfaction

Lower costs

Our Foundation

Gastro transitions of care pilot from 2015

Oliva job applicant scheduling
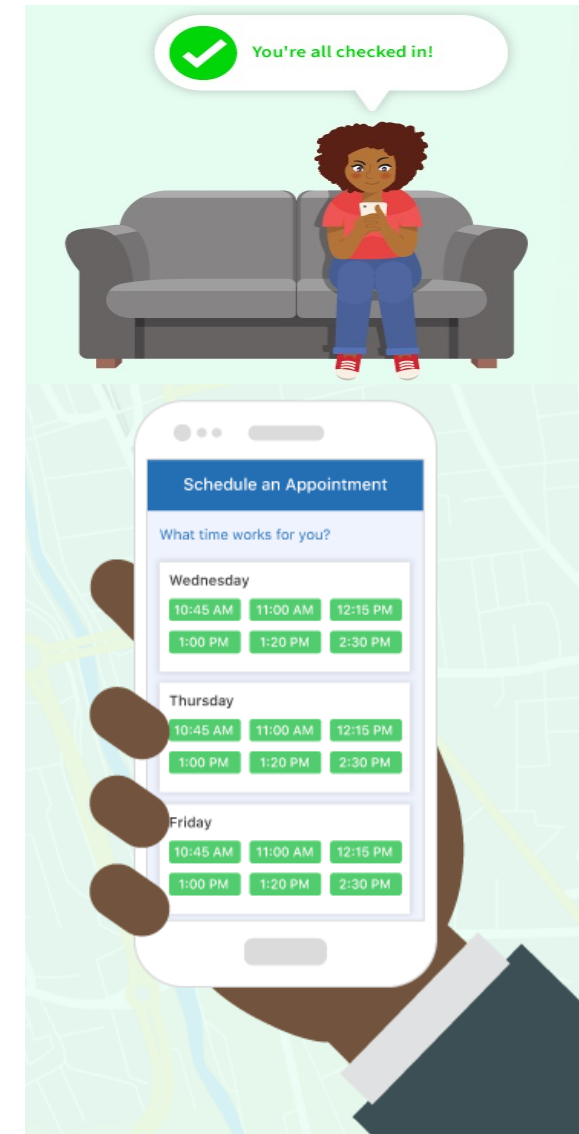
Aisera Service Desk Co-Pilot

Epic

What we need

Clear use case(s)

Focused SME and IT resource(s)

Technology partner(s)

Governance

Other Robotic Process Automation (RPA)

Why it matters

Improved efficiency (high volume, clear inputs/outputs, well defined/steady processes)

Consistency (error reduction)

Focus work on higher cognitive tasks (job satisfaction / dissatisfaction?)

Our Foundation

Claim status checking and Retro-authorizations RPA (RCHSD / R Systems)

Data and interface job scheduling (RCHSD)

Genomics pipeline (RCHSD/RCIGM)

What we need

Governance

Standard toolset

Operational champion(s)

Prioritization

SME & IT resources

6 BENEFITS OF IMPLEMENTING RPA IN HEALTHCARE

1 **PROCESSING COST REDUCTIONS**
UiPath reports the success story of implementing RPA in a hospital that needed to increase operational control in order to improve patients' experience. Automating revenue cycle functions like claims or billing, for instance, resulted in cutting down the cost from $4 to $1 per claim.

2 **STRONGER BILLING CYCLE**
Accounts payable and data digitization processes can be automated by means of RPA, thereby improving billing efficiency. By upgrading administrative processes, healthcare companies can significantly economize labour and financial resources.

3 **HUMAN LABOUR COST REDUCTIONS**
By passing on to robots manually-intensive tasks, healthcare professionals save time. They can use these additional time resources to produce higher-value work, by focusing on more fine-grained patient attendance rather than on tedious data entry.

4 **INCREASED EMPLOYEE SATISFACTION**
Craig Richardville, a pioneer of transitioning healthcare to a digital industry, argues that a higher level of healthcare professionals' job satisfaction is directly linked not only with better care for the patients, but also with higher ROI for the company.

5 **APPOINTMENT TURNOUT OPTIMISATION**
Software robots can include several factors in patients' appointment requests: their medical histories, current diagnosis, location, insurance carrier, personal preferences, etc., and use them to set appointments that closely match what is most relevant for the patients.

6 **SUPERIOR HEALTHCARE QUALITY**
By saving time, eliminating the risk of human error, and by allowing the staff to focus on patients. The increased operational efficiency may also expand the applicability range of healthcare. The healthcare system could thus better address the needs of more people.

RESULTS

MORE EFFECTIVE PATIENTS' SCHEDULING
Software robots can streamline online scheduling: appointment requests, diagnosis, location, insurance carrier, personal preferences, etc., can be gathered in a report, and forwarded to a referral management representative who actually makes the appointment.

IMPROVEMENT OF THE CARE CYCLE
RPA boosts data analytics and thus it makes continuous record monitoring possible. Analysing comprehensive amounts of data increases the likelihood of more accurate diagnosis, which leads to better-tailored treatment strategies.

Artificial Intelligence (AI) Predictive Modelling

Why it matters

Pattern recognition, enables faster insights, better care

Improved quality and safety

Improved productivity / focus on higher cognitive tasks

Improved patient flow

Our Foundation

Sepsis algorithms

Mendelian Phenotype Search Engine (MPSE)

MIC Sickbay

IT infrastructure management

Juniper Mist

What we need

Leadership

SME, data science, data engineering and IT capacity

Expert partners

Artificial Intelligence (AI) Image Analysis

Why it matters

Technology advances

Quality improvement across disciplines

Efficiency gains for highly specialized, expensive SMEs

Our Foundation

Arterys

Cohesic

Merge

Siemens

3D Lab

Panopto

What we need

Clinical Champions

Investment in platforms

Technical resource bandwidth

Leadership to manage change / disruption

Artificial Intelligence (AI)
Ambient Intelligence

Why it matters

Technology advances in speech recognition

Heightened Patient/Family expectations (pervasiveness of Alexa/Siri/Bixby/Google Assistant/Google Home)

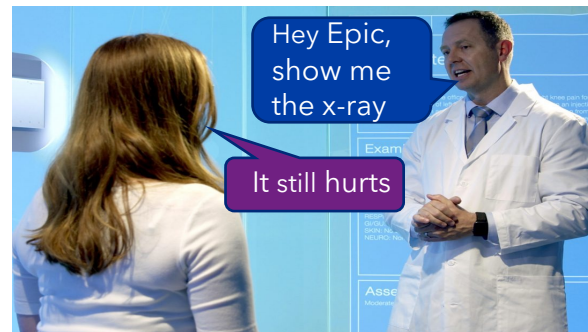Focus on patient, not keyboard

Reduce provider burnout

Gain efficiency, eliminate scribes

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Basic speech recognition mModal/Nuance

Vendor space in consolidation

What we need

Learning pilots/bake-offs

Technical resource bandwidth

Clinical champions

Investment in platforms

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Artificial Intelligence (AI)
Generative AI

Why it matters

Documentation burden cited as contributor to provider burnout

Explosion of tools (many based on OpenAI's ChatGPT) show gains in accuracy and efficiency in text generation and summarization

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Microsoft 365

Microsoft Co-Pilot

Epic

Nebula

What we need

Learning pilots

Technical resource bandwidth

Clinical and non-clinical use cases

Investment in platforms

Internet of Medical Things (IoMT)

Why it matters

Lower cost setting

Increasing quality of consumer devices

21st Century CURES

Our Foundation

Propeller Health (asthma)

Gluco Health (diabetes)

BardyDx, Cardionet, ZioPatch/iRythm (heart)
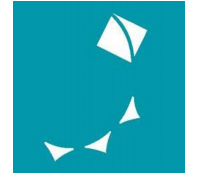
What we need

Governance / Strategy / Priorities

Leadership

Champion SMEs

CIS / Data / Integration / IT bandwidth

IoMT standards

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Any sufficiently advanced technology is indistinguishable from magic.

Arthur C. Clarke

BrainyQuote®

Thank you!

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