

Customer-First Focus: Blending Design Thinking and Lean Thinking

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Let's Deal With The Work

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Learning Objectives

- Understand Design Thinking methods for drawing out user needs and incorporating into the design
- Learn how a blended approach using Design Thinking & Lean Thinking provides a better design



Why this approach?

- Blend Design Thinking and Lean 3P



+



=

Better
Design





Current State

Nationally...

Each day, a Primary Care Doctor in the US would need to spend....



= 21.1 hrs per day

Yarnall et al. *Am J Public Health* 2003;93:635
Ostbye et al. *Annals of Fam Med* 2005;3:209



For each Primary Care Doctor...



Patient Visits



4,400 – 5,200 per year

Run room to
room to see pts

Patient Messages



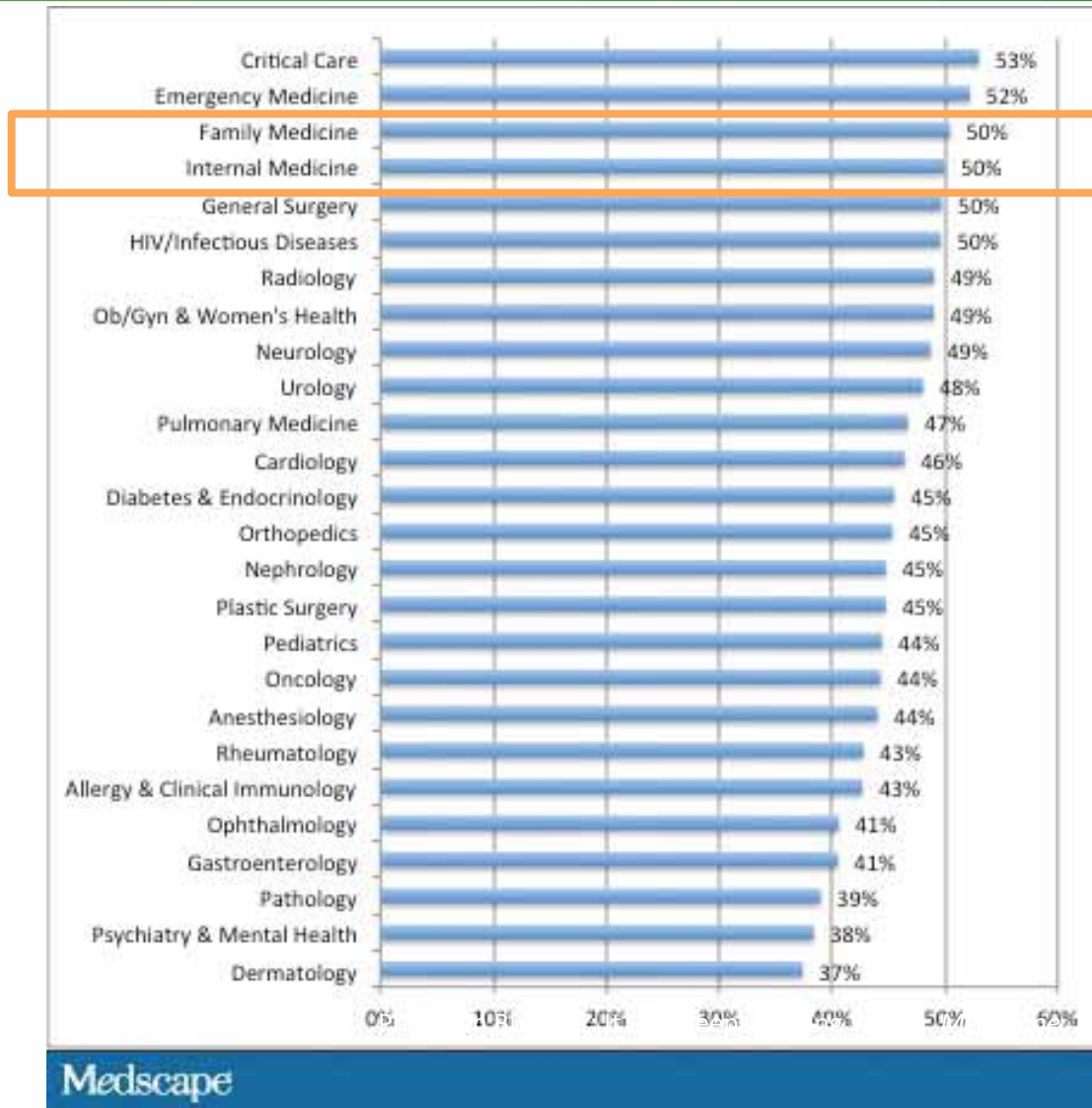
30,000 – 44,000 per year

Tasks are batch &
queued



National Perspective

Rising Primary Care Doctor Burnout



Burnout =
“An experience of physical, emotional, and mental exhaustion, caused by long-term involvement in situations that are emotionally demanding.”

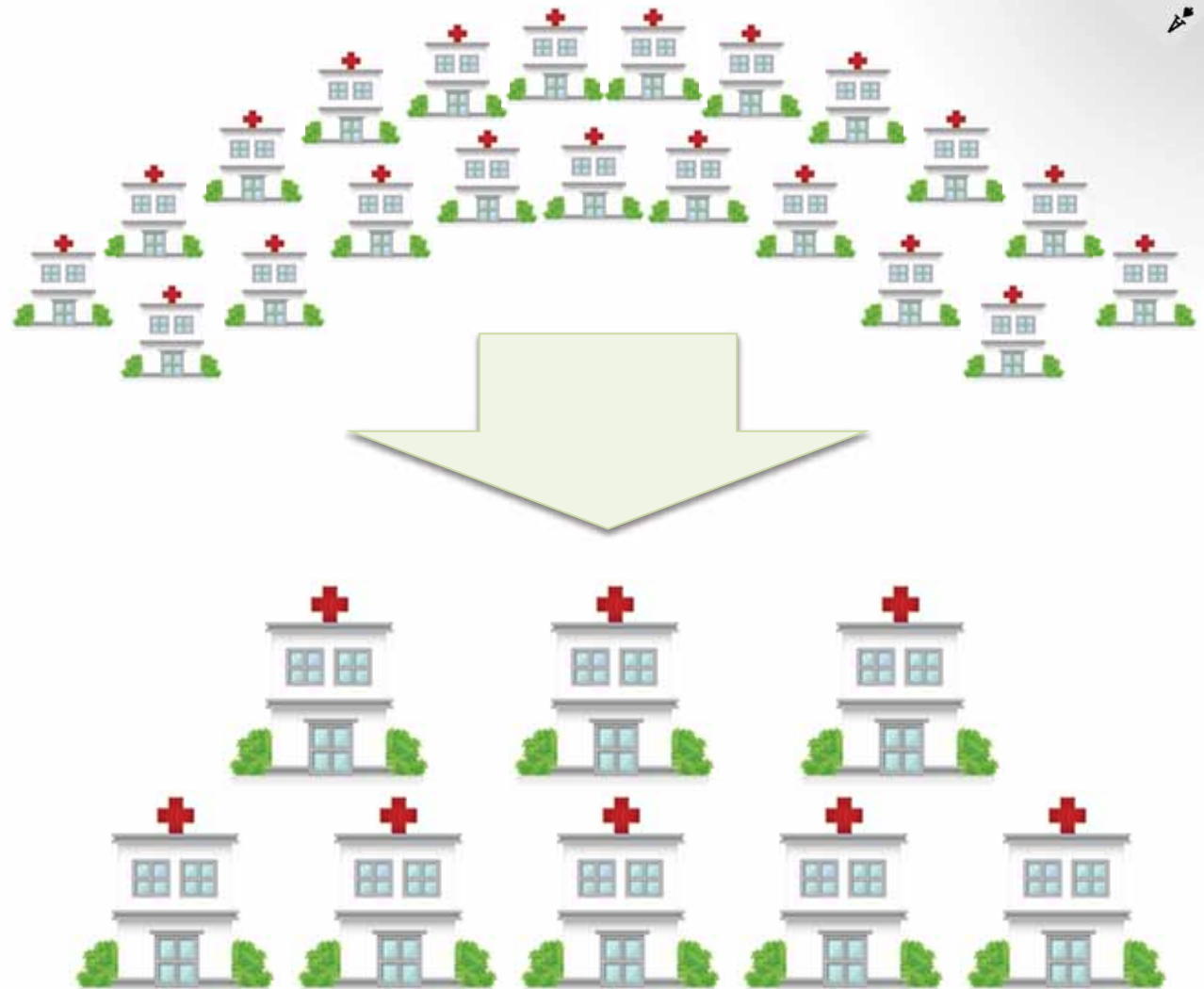


<http://www.medscape.com/viewarticle/838437>

ABC Medical Group

- Medical Group

- 500 Physicians & Advanced Practitioners (APs)
- 320,000 patients
- Outpatient primary care and specialty care



The Presenting Problem



4 Questions from Management

- 1) # of Exam Rooms?
- 2) # of Team Members?
- 3) Virtual Care?
- 4) Panel Size per MD?





Our Design Team
Primary Care



How might we design a model of care for Primary Care to better serve our patients & attract new patients?

Why Design Thinking?



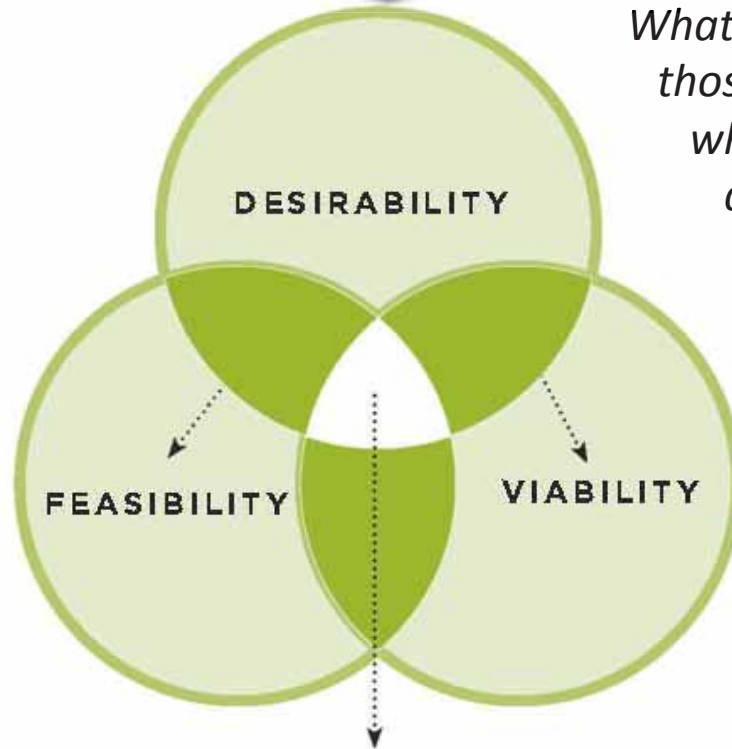
“No matter the size of an organization, services tend to be delivered through multiple departments that are designed to support their own operational efficiencies rather than deliver a holistic service experience for the consumer”

– Fran Samalionis, Head of service design at IDEO

Purpose: 'Human Centered' Design through empathy



3 Lenses:



What is desirable for those patients for whom you are designing?

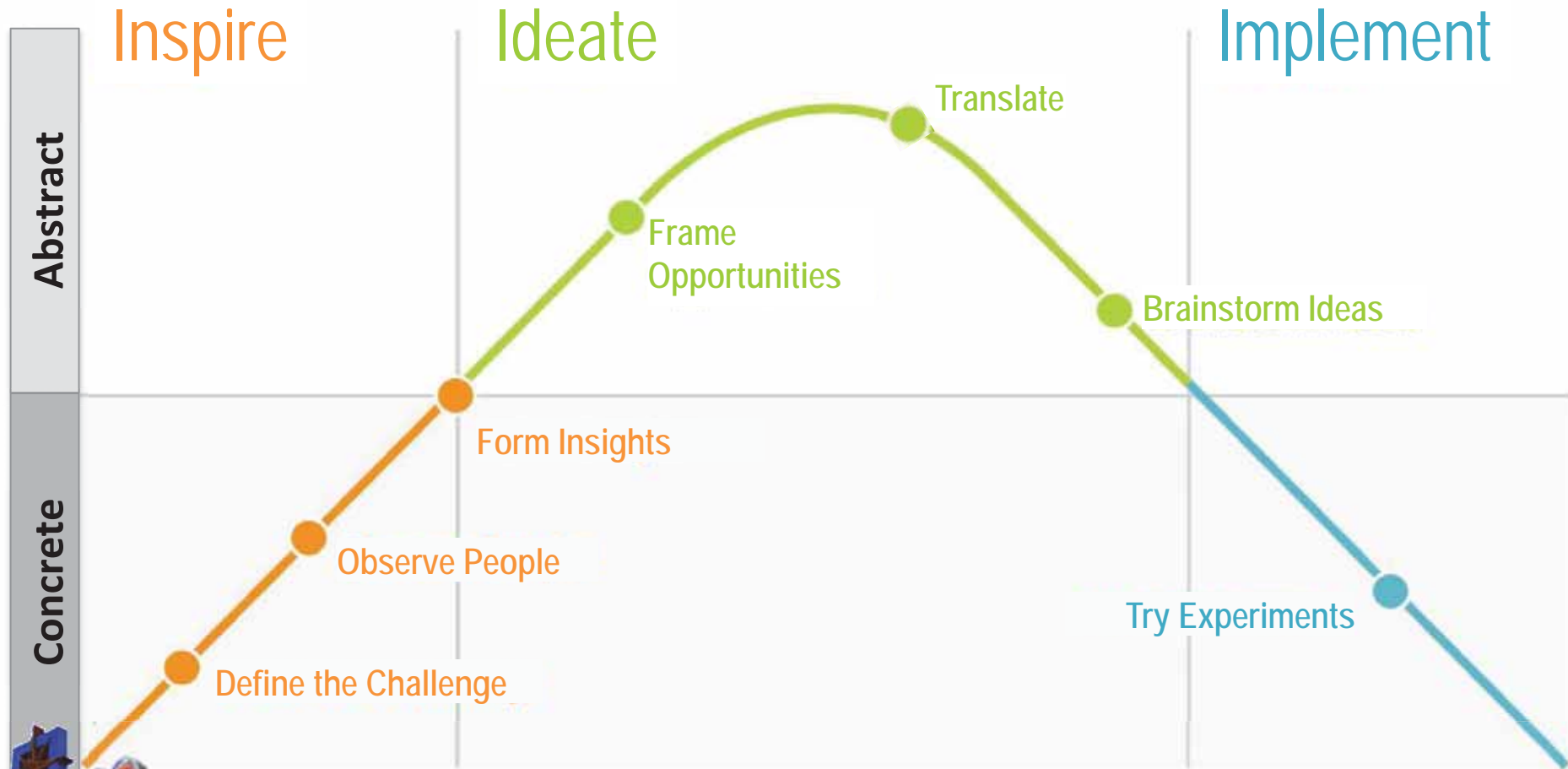
What is technically and organizationally feasible?

What is financially viable?

'Human Centered' Design



Design Thinking Innovation Approach



Approach & Methodology

- Wide and deep
 - Study **full range** of stakeholders & goes beyond the conventional consumer
- IDEO's collaborative approach to service design
 - Brings **wholeness** to inherent fragmentation (in the consumer experience)
- Uncover latent and explicit needs
 - Interview & encourage **story-telling** to reveal more than facts
 - **“Go See”** – Observe behaviors in the field (context of the process & environment)
- From Ideas to Action
 - Generate creative ideas and **bring them to life**
 - **Rapid Prototyping**: Make your ideas tangible, so you can gather **feedback** from others



4 Questions from Management



1) # of Exam Rooms?

& types of spaces

2) # of Team Members?

Roles & interactions within the spaces

3) Virtual Care?

Impact of virtual or e-work on spaces

4) Panel Size per MD?

of patients managed per Team



Customer-First Focus: User Research



User Research

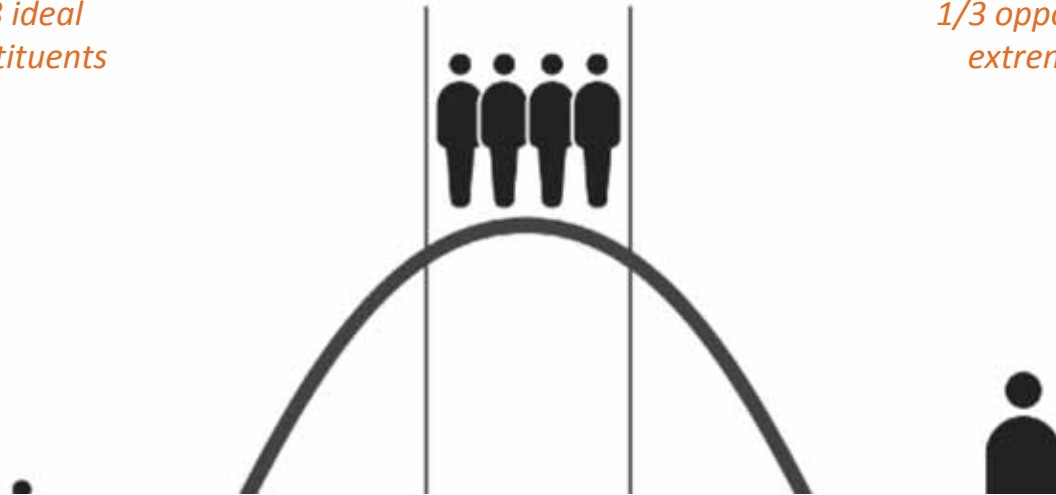
- Study **full range** of stakeholders & goes beyond the conventional 'average' consumer

*1/3 'average' –
somewhere in
between*

Start with extreme users.

*1/3 ideal
constituents*

*1/3 opposite
extreme*



Our Extreme Users



Patients:

Well

Chronic

Staff:

Experienced

New Graduate

Physicians:

Team
Player

*1/3 'average' –
somewhere in
between*

Solo Practitioner

Start with extreme users.

*1/3 ideal
constituents*



*1/3 opposite
extreme*



Developing Extreme User Interview Questions



Traditional = Closed

How often do you see pcp?

Who is your pcp and how long have you been a patient of theirs?

Would you prefer to wait for your provider or rather see someone else today?

Are you open to a visit on the phone, video, or email?

How do you feel about sharing work space with others vs. private office?

When your doctor is out of the office is there someone to help you? If so, who?

Design Thinking = Open

What can providers do to make you feel understood, heard, and cared for as a person (not just a patient)?

What should your role look like in an ideal process to care for your patients?

How do you envision your role in the process of receiving care?

Describe scenario where you would be comfortable having a colleague see your patient or even conducting the 'visit' virtually (eg phone, email, Chat, etc).



Extreme User Interview Process



Open Specific

Go Broad

Probe Deep

Extreme User Interview

Assign interviewer roles: Interviewer: _____ Note-taker/visual capturer/time keeper: _____

- Sample questions are provided below; select and circle most appropriate questions for the participant
- Your questions should flow smoothly as you go from specific to broad to deep
- The interview should only be 20 - 30 minutes, so you'll need to manage your time to ensure you're able to probe deeply
- Are you able to fill out the 'Interviewee Profile' before your interview?
- After your interview, fax this packet and your notes to: X51472 (or external _____)

	Patient (& family) Participants	Staff & Providers Participants
5-7 min; Choose 2 questions (circle)	Open Specific: Warm up the participant with questions they are comfortable with (e.g. demographics, role in process, stories of recent past)	
	1. Name, history as ABC patient (as comfortable) — who is your PCP & how long have you been a patient of theirs? 2. Have you ever heard of a care team approach in Primary Care? What do you know about it? 3. When was your last visit (how often do you see your PCP)? Reason for visit? How did it go? 4. Share stories that stick out in your memory (what went well, what didn't, insights)	5. Name, role, how long at ABC? 6. Tell us what you know about Care Team Model? 7. How have you been involved in care or service of patients using a care team model in recent past at ABC? 8. What colleagues & support staff are on your team? 9. Share stories that stick out in your memory (what went well, what didn't, insights)
6-8 min; Choose 2 questions (circle)	Go Broad: Prompt bigger, even aspirational, thinking that they may not be accustomed to on a daily basis (e.g. Aspirations for the future & System based questions)	
	10. What can providers do to make you feel understood, heard, and cared for as a person (not just a patient)? 11. How do you envision your role in the process of receiving care from your PCP? 12. What should care look like for a patient needing care from their PCP? 13. If you could change one thing in the health care system, what would it be?	14. What does ideal care look like — imagine no constraints? 15. What should your role look like in an ideal process to care for your patients? 16. How can you make patients feel understood, heard, and cared for as a person (not just a patient)? 17. If you could change one thing in the health care system, what would it be?
6-8 min; Choose 1 or 2 (circle most relevant to the situation) (circle)	Probe Deep: Dig deeper on the challenge at hand & prompt with 'what if' scenarios (e.g. Questions specific to innovation challenge & 'sacrificial' concepts (about risk, guarantees, trade-offs, future behaviors))	
	18. What if you were in a situation where you had the choice to come in for a 'routine' visit or stay home/work (via phone, video, chat, email, etc.) to receive attention of your PCP, which would you prefer? 19. How do you feel about seeing another provider (e.g. PCP or an Advanced Practitioner) sooner vs wait for your PCP to be available? Does your response vary if it is for a physical, urgent need, ongoing less acute issue?	22. What concerns/issues do you hear from patients about their care? 23. Do you know when patients are seen by other providers? How do you feel about this? 24. How do your different 'types' of patients determine how you spend your time/how you care for the patient? 25. Describe scenario where you would be comfortable having a colleague see your patient or even conducting the 'visit' virtually (eg phone, email, Chat, etc.)



Extreme User Interview Process



	Patient (& family) Participants	Staff & Providers Participants
5-7 min: Choose 2 questions (circle)	Open Specific: Warm up the participant with questions they are comfortable with (e.g. demographics, role in process, stories of recent past)	
	1. Name, history as RMG patient (as comfortable) – who is your PCP & how long have you been a patient of theirs? 2. Have you ever heard of a care team approach in Primary Care? What do you know about it? 3. When was your last visit (how often do you see your PCP)? Reason for visit? How did it go? 4. Share stories that stick out in your memory (what went well, what didn't, insights)	5. Name, role, how long at ABC? 6. Tell us what you know about Care Team Model? 7. How have you been involved in care or service of patients using a care team model in recent past at ABC? 8. What colleagues & support staff are on your team? 9. Share stories that stick out in your memory (what went well, what didn't, insights)



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Extreme User Interview Process



	Patient (& family) Participants	Staff & Providers Participants
6-8 min: Choose or draft 2 questions most relevant to the participant (circle)	Probe Deep: Dig deeper on the challenge at hand & prompt with 'what if' scenarios (e.g. Questions specific to innovation challenge & sacrificial concepts (about risk, guarantees, trade-offs, future behaviors))	
	<p>18. What if you were in a situation where you had the choice to come in for a 'routine' visit or stay home/work (via phone, video, chat, email, etc) to receive attention of your PCP, which would you prefer?</p> <p>19. How do you feel about seeing another provider (e.g. PCP or an Advanced Practitioner) sooner vs wait for your PCP to be available? Does your response vary if it is for a physical, urgent need, ongoing less acute issue?</p> <p>20. If we could provide appropriate medical care with no out of pocket (or minimal) expense to you, would you prefer that over a face to face visit with a co-pay?</p> <p>21. Have you been in the hospital, urgent care center or emergency room in the last year? Did you speak with your PCP before or after?</p>	<p>22. What concerns/issues do you hear from patients about their care?</p> <p>23. Do you know when patients are seen by other providers? How do you feel about this?</p> <p>24. How do your different 'types' of patients determine how you spend your time/how you care for the patient?</p> <p>25. Describe scenario where you would be comfortable having a colleague see your patient or even conducting the 'visit' virtually (eg phone, email, Chat, etc).</p> <p>26. What if you only cared for the most complex patients (ask PCPS) or the simplest (ask APs), how would your work be affected? What are your concerns? What are your ideas on how this can be better?</p> <p>27. What are the opportunities to streamline care and reduce waiting (either for an appointment or once patient arrives onsite)?</p> <p>28. What questions do you get from patients about their care? Are you able to address them? What resources would help?</p>



29 interviews in 4 days

"My Story"

Drawing of Interviewee:



Profile

- 53F pt since 2009
- chronic pain, dental on, smoker
- non-compliant, economic, question pain seeking behavior

Workarounds + Adaptations

Avoids CV because hard to get here and "doesn't want to stick them" (jumps)

My Insights

Continuity of care implies her ability to comply or participate in her care.

Geographic layout of office space inhibits patient care.

Health technology is not always prioritized

Resistant to access care due to multiple steps involved in the process

Things people care about

"I hate explaining things out and out" - cares about staying things done

When looking for a new health care provider, she is too big because she has pain and difficulty walking

"I've done sick"

Established with relationship with office, everyone at front desk office takes her

Find seeing our provider but considerable stress because "she knows me now"

Feared CV but phone or text maybe, I don't go online, I'm old school"

"My Story"

Drawing of Interviewee:



Profile

- Complex chronic illness
- BMT, GVHD, DMII etc...
- Strong connection to provider
- "Professional patient" who wants a life

Workarounds + Adaptations

She avoids interacting with people who she thinks won't help her

Loves My Care "Avoids getting the 3rd degree on the other"

My Insights

Ideal care for her starts and ends with the provider she trusts

Things people care about

Values communication among leading providers

Wants to be listened to

"I spend time trying to see you, it sounds for me, it's not all"

Wants her care from someone who knows her - "harder to find"

Patients feel fed up in our systems and it is frustrating to them

Some patients do what they are asked / told even though they don't want to

Surprises

She has a good sense of what our care needs even before the doctors she trusts

Her perception of her health is good, but her problems are common & severe

Has no trust in the VHS doctors and their systems

"Call me to check up" after a visit.

She wants to start the conversation - her end





"My Story"

Drawing of Interviewee:



Profile
- 12 years old - cerebral palsy
- Gen. Med. Doctor
- High standards, expects a lot

Workarounds + Adaptations

Devised an
exam with
MS

Education
is tailored
for long-term
providers.

My Insights

Case Teams
must have
Complimentary
Skills

Believe it
or not, having
with cardiac
band. That's

Speaking
with the
MS, makes
it easier
to get a team

Focus on
fairness
to get out
medical records
in a timely

Things people care about


Making good
care to
doable job
for RBs

Quality
Enhance Real
Medicine

Excellent patient
service

"My Story"

Drawing of Interviewee:



Profile PMS
Single
wheel chair
no kids.
Sleep kids.

Workarounds + Adaptations

Weight lot of work
in kitchen

Food Preparation

Widening her
description of
what we do

Realized
the need

Things people care about

Urgent vs
Emergency
Call
"words different"

Some staff
not talking to
Chaperone they
have they
call

"Want to visit
patient room"

Thank people so
you want to
be thanked

"Defined when
I have to order
patient Call"

Empowered to
clear up
Berk dept.
Blood samples
error.

"What is said &
what is meant
is communication"

Japanese just
Call "Excuse me"

Surprises

"It's clear my
call has their
own do"

Patients don't
understand
the MS/urgent
world

Emergency calls
with providers
average of 30
min I don't
know how

Medical team
collaborating
with family to complete

My Insights

From structured
process to plan
Call

We are not taking
the time to
ask, what are
we doing without
learning

Training individual
Staff working
Clinical questions
when they are
not needed

We understand
of how team
work
Spending effort
on personal topics

Goal of approach
staff improvement
Learn during
care

Provider roles
to be fixed

Developed Insights



PTIONS



Our Design Challenge

How might we design a means of care for adult...

Handwritten notes and orange sticky notes are attached to the whiteboard. Some sticky notes include:

- Handwritten notes on the left side of the board.
- Orange sticky notes with text such as "Handwritten notes on the right side of the board."
- Orange sticky notes with text such as "Handwritten notes on the right side of the board."



Insight Clusters + Themes

Team Playbook

GPS for ABC

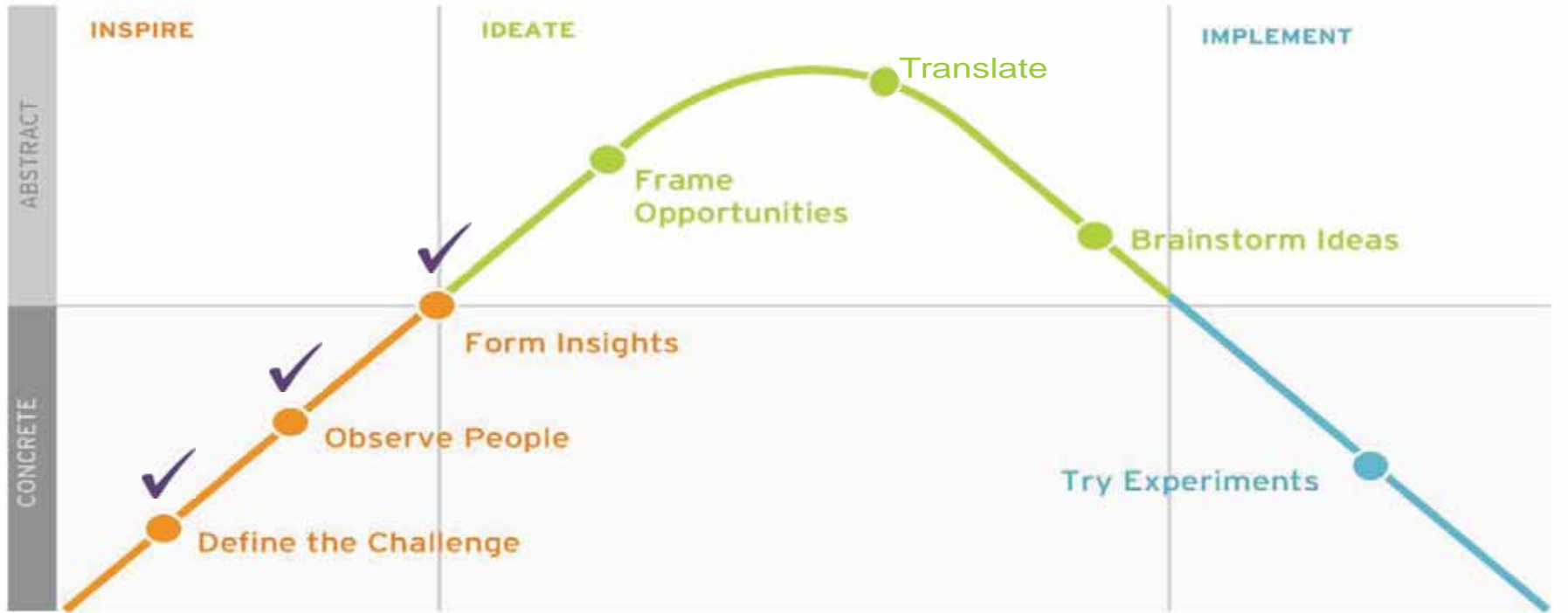
Compass

Team Chemistry

“Know me”

Care how I want it







"Time to make the Donuts" Game Results

	Push/Batchd Round 1	Pull/Batchd Round 2	Pull/1x1 Round 3	Pull/1x1/ Cell Round 4
Cycle Time (min:sec)	4:57 (2:32)	3:52	0:35	0:24 (2:31)
Total WIP (units)	116	24	2	10
Batch Size	6	6	1	1
Acceptable Output (Units)	0 11	12 0	27 3	39 0
Productivity (Output/Operator)	0	2	4.5	65
First Pass Quality Yield (%)	0%	100%	90%	100%
# of Handoffs	5	5	5	2



*Learn &
have fun!*



Time to Make the Donuts

- Flow
- 1x1
- Pull
- Cell
- ERACS
 - Eliminate
 - Rearrange
 - Add
 - Combine
 - Simplify



Why Lean Thinking?

3P: Production, Preparation, Process

Optimize the production or service system to deliver better quality, on demand, at an affordable cost





- Gather**
- Interviews
 - Gemba

- Synthesize**
- Insights
 - “How might we...”s (what stakeholders want)

- Inform & Inspire**
- Natures “cool modes”
 - VA High Touch Points

- Design 1**
Conceptual
- Big Ideas

- Design 2**
Functional
- Macro Processes
 - Team member roles & responsibilities
 - Introduce spatial & proximal relationships

- Design 3**
Full scale prototype
- Test macros, R&R’s, spatial/proximal
 - Simulation/ in vitro
 - Inform micro processes
 - Refine spatial/proximal

- Design 4**
Model Cell
- All functions, roles, micro processes
 - ID gaps
 - Test in vivo with day to day real challenges



Conceptual Design

First level translation

Customer insights to Big Ideas



Game Time!






7 Ways: Paperclips

- Directions (5 min):
 - Come up with 7 ways to use a paperclip
 - Work individually
 - Draw your idea
 - 1 idea per box
- Share with your table your ‘most interesting’ idea
- Reflection:
 - Why 7?
 - What was your “most interesting” idea?
 - At what point was it hard to come up with another idea?



7 Ways: Paperclips

Paperclip Exercise

①	① Ring	Clip paper together	Hang something	Hold paper 	Clip Paper
②	② Ear Wax Removal	TOOTH PICK	Attach paper together	Open iPhone/smart phones 	Unlock doors
③	③ Purple Popper	Hangs object	Pick a lock	Poke a hole	Reset electronics
④	④ Tooth pick	RESET ELECTRONIC EQUIPMENT	Back scratcher	Use as a ring 	Pretend dental retainer
⑤	⑤ Zipper Holder	REMOVE FOAM FROM NOSE	Writing instrument (Carving)	Clean in between teeth	Cuticle care
⑥	⑥ Safety Pin	SCULPTURE (ART)	Poke a hole (awl)	Hair clip/barette	Injury poke out
⑦	⑦ Worry Stone	Jewelry	ornament	Metal Art 	Clean under finger nails
			Make a finger splint	Make a triangle 	earring jewelry
			Weapon (eye bar)	Self harm	ring
					mark page
					facial tool (clean pores)
					prison tattoos



Core Functions within Primary Care



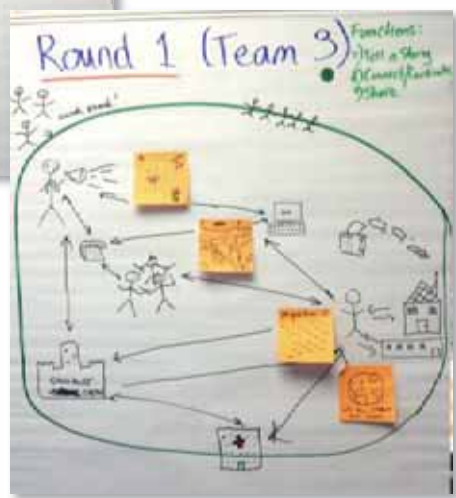
7 Ways in Nature



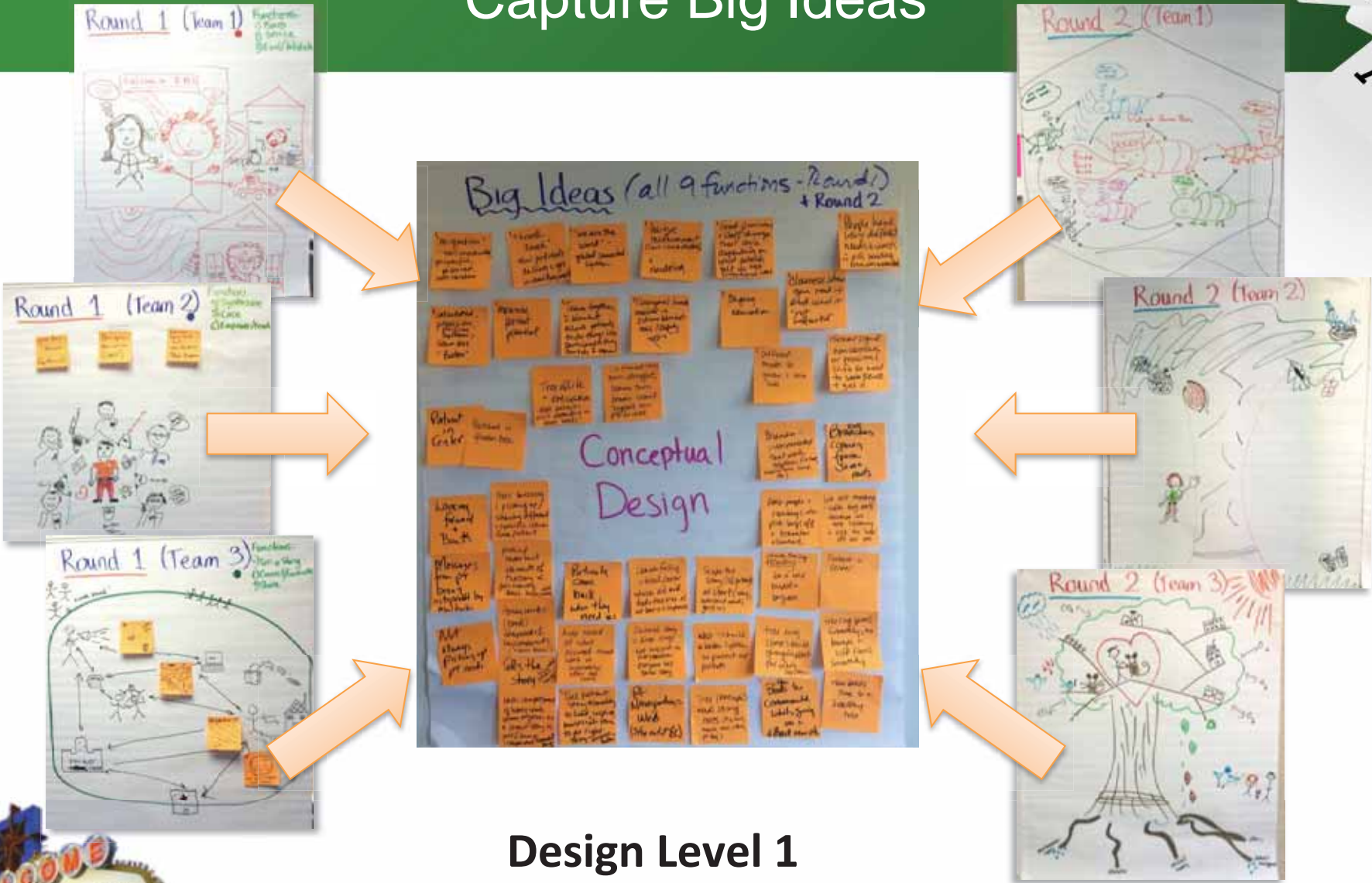
1	2	3	4	5	6	7	8	9	
Band (Prepare)	Sense (Observe)	Evaluate (Validate)	Synthesize	Care	Empower (Teach)	Tell a Story	Connect	Coordinate	Share
	<p>hear- Wolf howl to organize pack</p>	<p>Safety - ability to move on ice or snow</p>	<p>Synthesis of water</p> $2H_2 + O_2 \rightarrow 2H_2O$		<p>Learn, not learning how to learn</p>	<p>TRAIL</p>		<p>ELEPHANTS SHARE CARE</p>	
<p>Animal to animal</p>	<p>Swell → taste!</p> <p>shark eating fish</p>	<p>Building a spiderweb (location, support, size of prey)</p>	<p>Regeneration (Tomb)</p>	<p>BUGS</p>	<p>Memorized Teaching child to fly</p>	<p>COME AND</p>		<p>WOLF PACK SHARING A KILL</p>	
<p>Special features</p>	<p>hear</p> <p>listening to rain fall</p>	<p>Using sonar to determine location (dolphins)</p>	<p>DNA + ENA + TOL</p>	<p>Home Breeding The Dog</p>	<p>Positive Reinforcement to achieve desired behavior</p>	<p>WINN</p>		<p>EMPEROR PENGUINS SHARE CARE OF EGGS</p>	
	<p>Swell - Dogs!</p>	<p>Using senses to determine quality/safety of food (i.e. sniffing)</p>	<p>Photosynthesis</p>		<p>Teaching by immersion (language acquisition)</p>	<p>DNA</p>	<p>1500</p>	<p>Mother bird sharing food with chicks</p>	



'The Whats' – Inspired by Nature



Capture Big Ideas



Design Level 1





- Gather**
- Interviews
 - Gemba

- Synthesize**
- Insights
 - “How might we...”s (what stakeholders want)

- Inform & Inspire**
- Natures “cool modes”
 - VA High Touch Points

- Design 1**
Conceptual
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- Design 3**
Full scale prototype
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- Design 4**
Model Cell
- All functions, roles, micro processes
 - ID gaps
 - Test in vivo with day to day real challenges



Functional Design

Macro Process

Team member roles & responsibilities
Introduce spatial & proximal relationships





"Design is a contact sport" - IDEO

Exercise: Design Challenge



The Challenge

- 18 minutes
- Build the tallest freestanding structure with the marshmallow on top



Our 1st Design Challenge

The Challenge

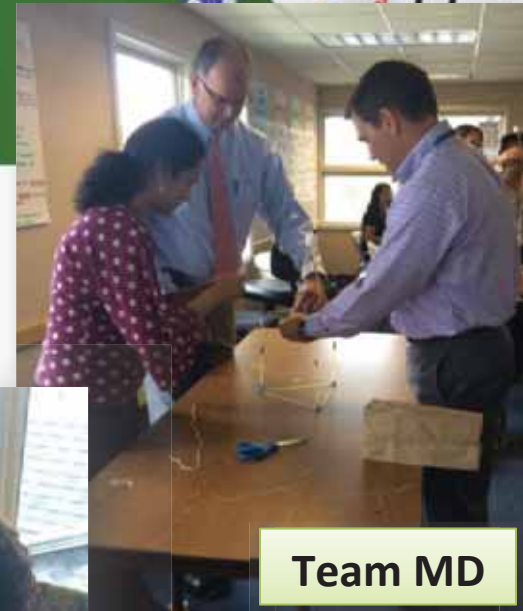
- 18 minutes
- Build the tallest freestanding structure with the marshmallow on top



Team Front Line



Team MD



Team

Management



Team NP



...and the winning team!



Ta-Da!



Functional Design Exercise

↳ Design at a concrete level the: HOW + WHO

With you team:

□ Construct a 3D tabletop to meet the 'Design Challenge'

* Encapsulate the big ideas

* Define Macro Processes

* Team Member Roles + Responsibilities

* Introduce Spacial + Proximal relationship thinking



From Concept to 'How & Who'



From Concept to 'How & Who'





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Full Scale Prototyping & Simulation

*Test macros, Roles & Responsibilities, spatial/proximal
Simulation/ in vitro
Inform micro processes
Refine spatial/proximal*



Physical, process and data simulation



Data Modeling

Item	Item Code	Item Name	Item Description	Item Category	Item Unit	Item Price	Item Stock	Item Location	Item Status	Item Date	Item Qty	Item Cost	Item Revenue	Item Profit	Item Margin
Item 1	1001	Item 1 Name	Item 1 Description	Item 1 Category	Item 1 Unit	Item 1 Price	Item 1 Stock	Item 1 Location	Item 1 Status	Item 1 Date	Item 1 Qty	Item 1 Cost	Item 1 Revenue	Item 1 Profit	Item 1 Margin
Item 2	1002	Item 2 Name	Item 2 Description	Item 2 Category	Item 2 Unit	Item 2 Price	Item 2 Stock	Item 2 Location	Item 2 Status	Item 2 Date	Item 2 Qty	Item 2 Cost	Item 2 Revenue	Item 2 Profit	Item 2 Margin
Item 3	1003	Item 3 Name	Item 3 Description	Item 3 Category	Item 3 Unit	Item 3 Price	Item 3 Stock	Item 3 Location	Item 3 Status	Item 3 Date	Item 3 Qty	Item 3 Cost	Item 3 Revenue	Item 3 Profit	Item 3 Margin
Item 4	1004	Item 4 Name	Item 4 Description	Item 4 Category	Item 4 Unit	Item 4 Price	Item 4 Stock	Item 4 Location	Item 4 Status	Item 4 Date	Item 4 Qty	Item 4 Cost	Item 4 Revenue	Item 4 Profit	Item 4 Margin
Item 5	1005	Item 5 Name	Item 5 Description	Item 5 Category	Item 5 Unit	Item 5 Price	Item 5 Stock	Item 5 Location	Item 5 Status	Item 5 Date	Item 5 Qty	Item 5 Cost	Item 5 Revenue	Item 5 Profit	Item 5 Margin
Item 6	1006	Item 6 Name	Item 6 Description	Item 6 Category	Item 6 Unit	Item 6 Price	Item 6 Stock	Item 6 Location	Item 6 Status	Item 6 Date	Item 6 Qty	Item 6 Cost	Item 6 Revenue	Item 6 Profit	Item 6 Margin
Item 7	1007	Item 7 Name	Item 7 Description	Item 7 Category	Item 7 Unit	Item 7 Price	Item 7 Stock	Item 7 Location	Item 7 Status	Item 7 Date	Item 7 Qty	Item 7 Cost	Item 7 Revenue	Item 7 Profit	Item 7 Margin
Item 8	1008	Item 8 Name	Item 8 Description	Item 8 Category	Item 8 Unit	Item 8 Price	Item 8 Stock	Item 8 Location	Item 8 Status	Item 8 Date	Item 8 Qty	Item 8 Cost	Item 8 Revenue	Item 8 Profit	Item 8 Margin
Item 9	1009	Item 9 Name	Item 9 Description	Item 9 Category	Item 9 Unit	Item 9 Price	Item 9 Stock	Item 9 Location	Item 9 Status	Item 9 Date	Item 9 Qty	Item 9 Cost	Item 9 Revenue	Item 9 Profit	Item 9 Margin
Item 10	1010	Item 10 Name	Item 10 Description	Item 10 Category	Item 10 Unit	Item 10 Price	Item 10 Stock	Item 10 Location	Item 10 Status	Item 10 Date	Item 10 Qty	Item 10 Cost	Item 10 Revenue	Item 10 Profit	Item 10 Margin



Supply & Demand Methodology



Available Time (hrs per week)

		35	40	45	50
Panel size	3000	89.4%	78.2%	69.5%	62.6%
	3250	96.8%	84.7%	75.3%	67.8%
	3500	104.3%	91.3%	81.1%	73.0%
	3750	111.7%	97.8%	86.9%	78.2%
	4000	119.2%	104.3%	92.7%	83.4%

Over Capacity

Decrease Panel Management by:

		10%	20%	30%	40%
Panel size	3000	69.5%	67.0%	64.5%	62.0%
	3250	75.3%	72.6%	69.9%	67.2%
	3500	81.1%	78.2%	75.3%	72.3%
	3750	86.9%	83.8%	80.6%	77.5%
	4000	92.7%	89.4%	86.1%	82.7%

Over Capacity

Outcomes:



- Panel Size
- # of rooms/team
- Cost
- Patient Satisfaction
- Staff & Provider Satisfaction



4 Questions from Management



1) # of Exam Rooms?

& types of spaces

2) # of Team Members?

Roles & interactions within the spaces

3) Virtual Care?

Impact of virtual or e-work on spaces

4) Panel Size per MD?

of patients managed per Team



How might we design a model of care for Primary Care to better serve our patients & attract new patients?

Team Care Model

Key Concepts

Learning Lounge

Key design elements

- Greeted immediately upon building entry
- Design in value from minute one
- Tailored/personalized education
- Invite patient participation in their care
- Value-added space vs. waiting room

Impact on space

- Centrally located, shared by all teams

Future detail design experiments

- Flow testing
- Shared resource to coach & educate
- Human-Centered Design project

Team Space

Key design elements

- Teams co-located to reduce searching & queuing
- Team room is where value-added work occurs
- Shared wall with exam rooms
- 'Real work' happens here – panel management, virtual care (not just volume-based work)

Impact on space

- Shared wall = eliminated hallway
- Separate patient entrance from staff entrance

Future detail design experiments

- Test leverage & flow possibilities when 2 teamlets work together in a team room
- Flow testing
- Determine space configuration details to best support team roles & work processes

Shared MD/AP Panel

Key design elements

- MD/AP supported by ~ 2 nurses, 2 MAs, 2 PSSs
- Combine capacity for visit
- Combine capacity for panel management
- Work and patients don't wait
- Patients feel RMG 'knows me'

Impact on space

- Shared panel, shared rooms: "first available"
- More efficient use of rooms

Future detail design experiments

- Flow testing
- Design & test schedule model mix
- Standard work
- Process design
- Model Cell testing

Others...



Pre-Visit Work

Key design elements	<ul style="list-style-type: none"> Plan & prepare for the patient visit Information gathering includes clinically appropriate dialogue ("know me") Share profile gathered with provider & team members on day of visit
Impact on space	<ul style="list-style-type: none"> Private & quiet thinking space needed for phone work Reduce time in patient room
Future detail design experiments	<ul style="list-style-type: none"> Develop detailed processes for both patients who prefer 'prior to visit' questionnaire vs. pre-visit phone call with nurse Evaluate & develop Web questionnaire

Top of License

Key design elements	<ul style="list-style-type: none"> Appropriate elevation of each team member role Shift CDM patients from MD/AP to RNs Level work across the entire team
Impact on space	<ul style="list-style-type: none"> Better flow = less stagnation & waiting Space reflects functional needs across care delivery
Future detail design experiments	<ul style="list-style-type: none"> Flow testing Role definition, testing, refinement Detailed space design to support flow & roles

Patient Rooms

Key design elements	<ul style="list-style-type: none"> Not every room needs an exam table Those that do need a mechanism to examine patients might not use a classic exam table
Impact on space	<ul style="list-style-type: none"> Cost for patient rooms will be significantly less overall
Future detail design experiments	<ul style="list-style-type: none"> Flow testing Iterate through several schedule templates to determine better flow models for patient population for that site Determine what % of patient rooms require an exam table/chair on opening day

Lab Redesign

Key design elements	<ul style="list-style-type: none"> 1 Med Lab Tech per site to run most common labs Central lab/Sendout lab to run 'odd balls' 1 Med Tech supervisor oversees performance of entire lab system (sites and central) MAs vs. phlebotomists draw bloods at sites
Impact on space	<ul style="list-style-type: none"> Lab results completed & provider instructions given during patient visit Reduce follow-up visits & rework by all
Future detail design experiments	<ul style="list-style-type: none"> Flow testing Develop detailed processes Cost analysis

Flow Patients

Key design elements	<ul style="list-style-type: none"> Patients flow directly into the patient room Patients don't move – services come to the patients Reduce redundancies
Impact on space	<ul style="list-style-type: none"> Instead of a dedicated waiting room per 'module', one centralized Learning Lounge per site
Future detail design experiments	<ul style="list-style-type: none"> Flow testing Iterate through several schedule templates to determine better flow models for patient population for each site

One by One Approach

Key design elements	<ul style="list-style-type: none"> Eliminate batch approach to work (start by reducing batch size) – e.g. documentation Recognize that patient visits are just one part of the team's work each session. Provide scheduled time for virtual work, panel management, phone calls from other providers, etc.
Impact on space	<ul style="list-style-type: none"> Team room must support the flow of 1x1 work
Future detail design experiments	<ul style="list-style-type: none"> Flow testing Develop detailed processes to support 1x1 work Determine space configuration details to best support team roles & workflow processes





- Gather**
- Interviews
 - Gemba

- Synthesize**
- Insights
 - “How might we...”s (what stakeholders want)

- Inform & Inspire**
- Natures “cool modes”
 - VA High Touch Points

- Design 1**
Conceptual
- Big Ideas

- Design 2**
Functional
- Macro Processes
 - Team member roles & responsibilities
 - Introduce spatial & proximal relationships

- Design 3**
Full scale prototype
- Test macros, R&R’s, spatial/proximal
 - Simulation/ in vitro
 - Inform micro processes
 - Refine spatial/proximal

- Design 4**
Model Cell
- All functions, roles, micro processes
 - ID gaps
 - Test in vivo with day to day real challenges



Model Cell

All functions, roles, micro processes

Identify gaps

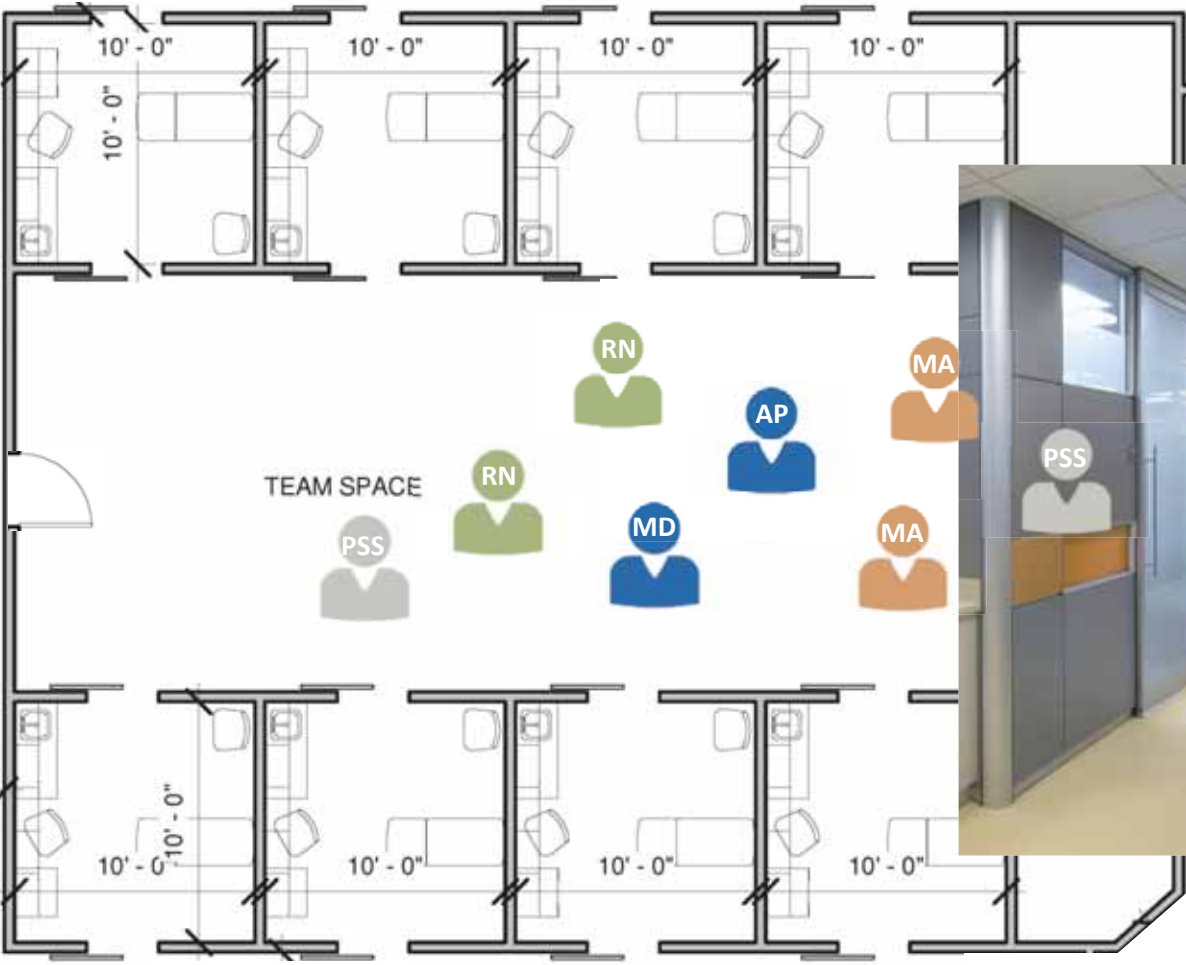
Test in vivo with day to day real challenges



Model Cell → Model Site Development

- Progress from macro to micro process design through test & iteration using:
 - Real Patients
 - Real Teams
 - Real Space
 - Real Operational Challenges





Patient
Entry



Resources

- 3P

- http://www.mwcmc.org/Resources/Documents/02-06-03_Coletta-Earley_Lean_3P_Advantage.pdf

- Design Thinking

- <https://www.ideo.com/work/human-centered-design-toolkit/>
- <https://challenges.openideo.com/content/resources>

- Marshmallow Challenge

- <http://marshmallowchallenge.com/Welcome.html>



Questions?

