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Successful Implementation of a Digital Financial Services for Health Project
Practical Considerations

Health Sector Group
1 March 2022

ACCESS health international

Agenda

- Introduction & Learning Objectives
- Digital Financial Services in Healthcare: models and ecosystem
- Launching a DFS4H Project
- Pitfalls
- Success Stories
- Q&A

ABOUT US

Dr. Pankaj Gupta
Digital Health Management Consultant

Adrienne Mendenhall
Global Business Development Lead
ACCESS Health Southeast Asia

Learning Objectives

1. Understand what is needed to develop the **legal** and **regulatory space** to **enable** successful takeoff for digital financial services for health.

2. Understand **key implementation concerns** and **approaches** towards **implementing DFS solutions** to meet specific health system challenges

3. Understand how to **monitor** and **evaluate DFS implementation** to assess the **impact** on health system outputs and outcomes

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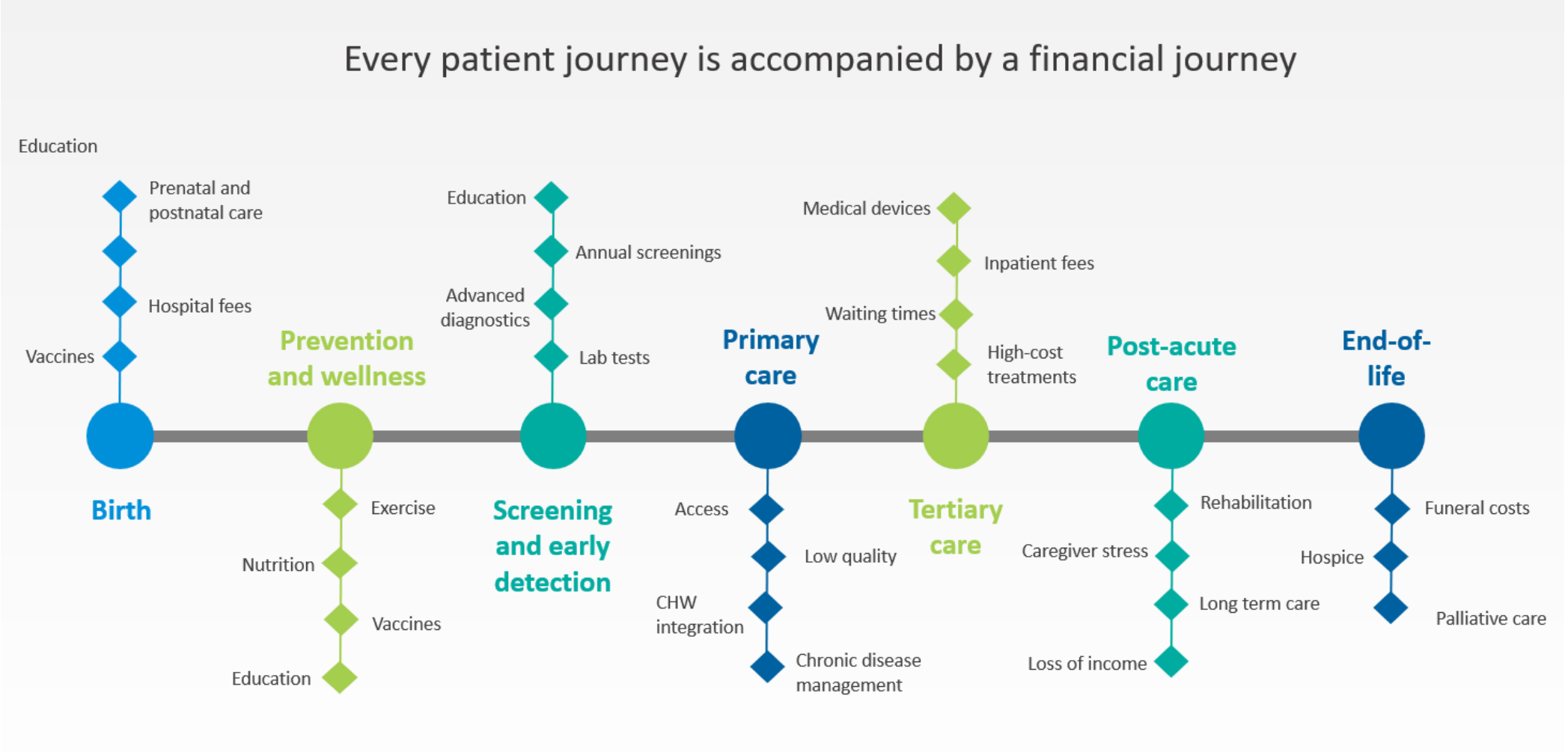
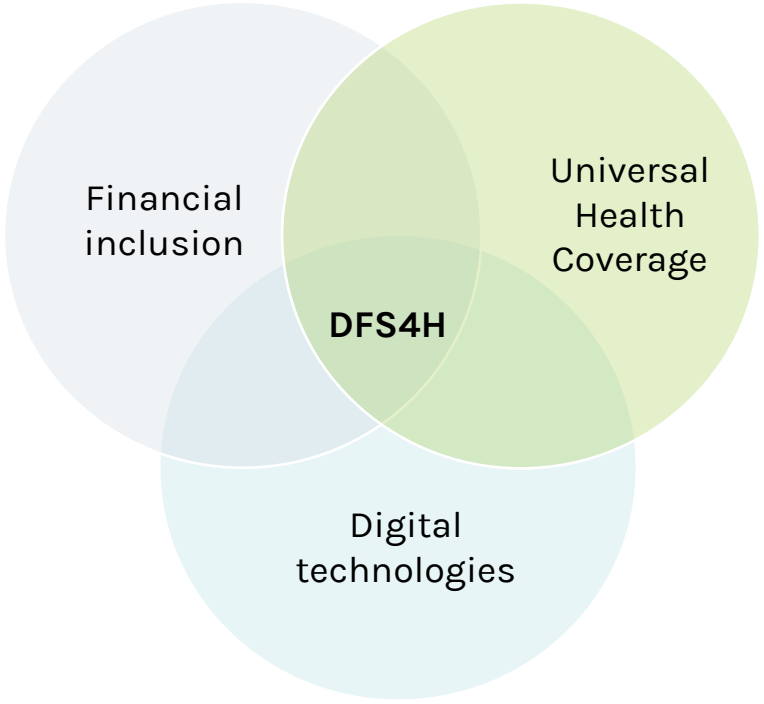
WHY DIGITAL FINANCIAL SERVICES IN HEALTHCARE?



Average cost of health care increases with age and disease burden.


An estimated 925 million people per year face healthcare costs that put them at risk of financial catastrophe. This was *before* the pandemic.

WHAT ARE DIGITAL FINANCIAL SERVICES FOR HEALTH?



Financial inclusion is where individuals and businesses have access to useful and affordable financial products and services that meet their needs and are delivered in a responsible and sustainable way.

Universal health coverage is defined as ensuring that all people have access to quality health services (including prevention, promotion, treatment, rehabilitation and palliation) *without undue financial hardship.*

Digital financial services for health applies the technologies and business models of financial inclusion to achieve the goals of universal health coverage, resulting in increased access and affordability of high-quality care, for everyone.

WHAT ARE DIGITAL FINANCIAL SERVICES FOR HEALTH?

Cashless Payments

- Healthcare expenditures that take place online or via bank transfer, card services, or mobile network
- Provides a transparent financial record
- Allows for integration with other digital platforms

Digitalized data

- Information that is digitally captured, stored, processed, and distributed
- Includes artificial intelligence/big data, digital ID, blockchain, cloud, and digital applications

Insurtech

- Any insurance product that is applied for, purchased, claimed against, or reimbursed digitally
- Automated claims processing reduce costs and human error. Increases financial protection
- Digital ID reduces insurance leakage

PasarPolis.com

Health Savings/E-Wallets

- Digital savings/wallets that facilitate easy healthcare payments between patient, payor and provider
- Allows for aggregated payments from multiple payors
- Remittances can be directed to healthcare expenses

BIMA

Digital Lending

- Loans that are applied for, disbursed, and managed through digital channels for healthcare expenditure.
- When combined with alternative risk scoring, patients, clinics and pharmacies without credit can access cash advances/loans

AROGYA FINANCE
Medical Loans Made Easy

Direct Benefits Transfer

- Payments made directly from the government or donor to beneficiaries
- E-vouchers: issued to access and pay for specific healthcare services.
- Rapidly and efficiently confirm identity and disburse payments

e₹UPI

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Provider Cashflow Management

- Cashless payments reduce high costs and complicated paper trail of moving cash
  - Patient fees
  - Vendor payments
  - Wages to FHWs
  - Claims reconciliation
- E-invoicing and e-billing reduce administrative costs

Supply Chain Management

- Digital procurement and tracking of goods purchased and received
- Provides a transparent and sharable record of transactions
- Reduces leakage in the supply chain while increasing cost efficiency, freeing up funding for patient care

National Digital Insurance Platforms

- Digitized integration of health and financing data and processes
- Patients have direct access to health records and program/insurance eligibility
- Data for better planning of UHC policies and provision of care

?

BENEFITS OF DFS FOR HEALTH

Patients

- Greater utilization of health services
- Increased ability to afford quality care
- Potential to increase insurance coverage of the targeted population
- Ease of use compared to paper-based systems
- Encouraged saving behavior
- Greater user engagement as the user has access to real-time information

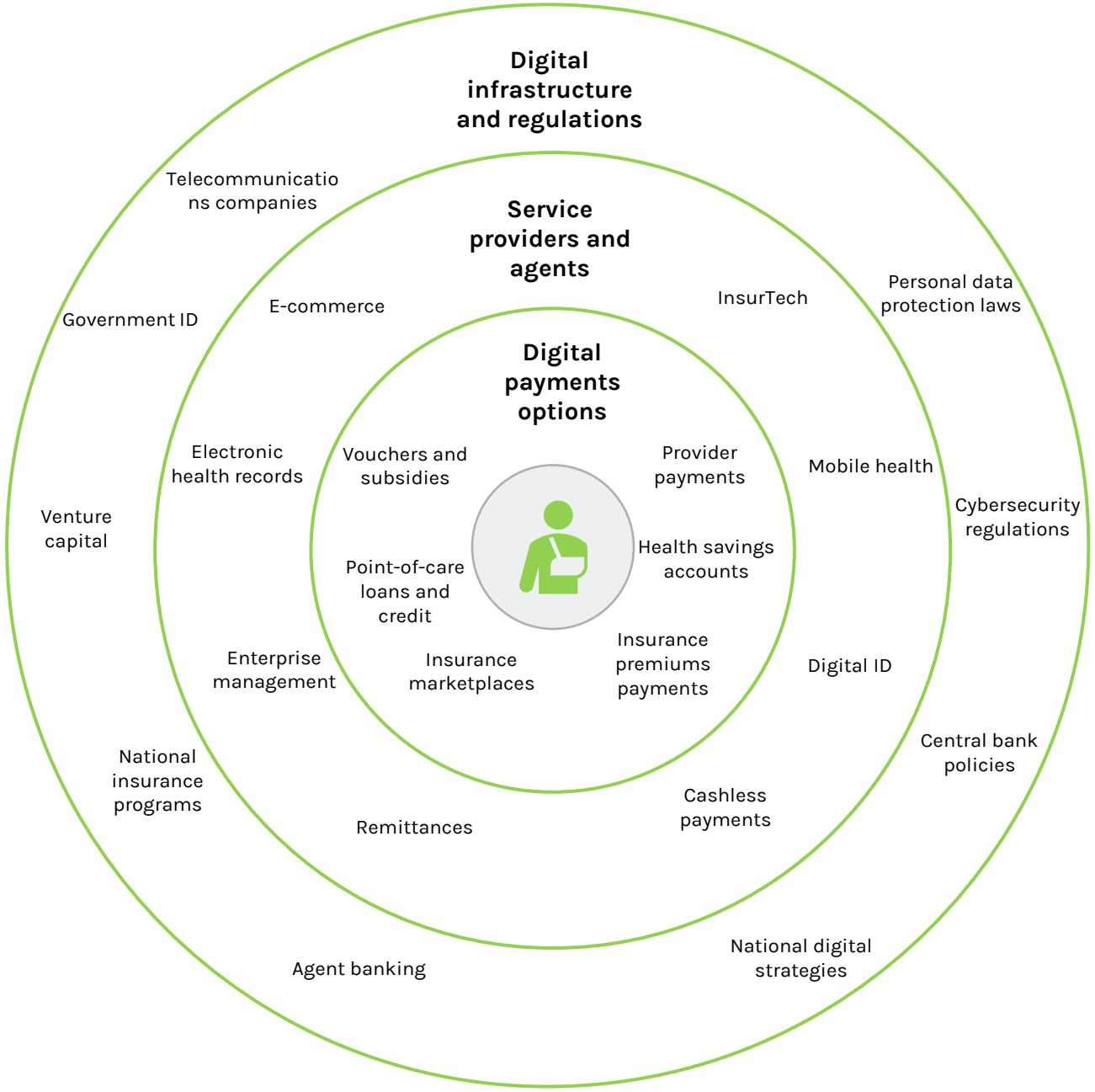
Providers

- Cost savings and better cash flow management
- Capital available to invest in improving quality of services
- Automated management brings in greater efficiency, transparency, equity, and control in government programs
- Better quality of data for case management
- Increased revenue as demand for health services rises

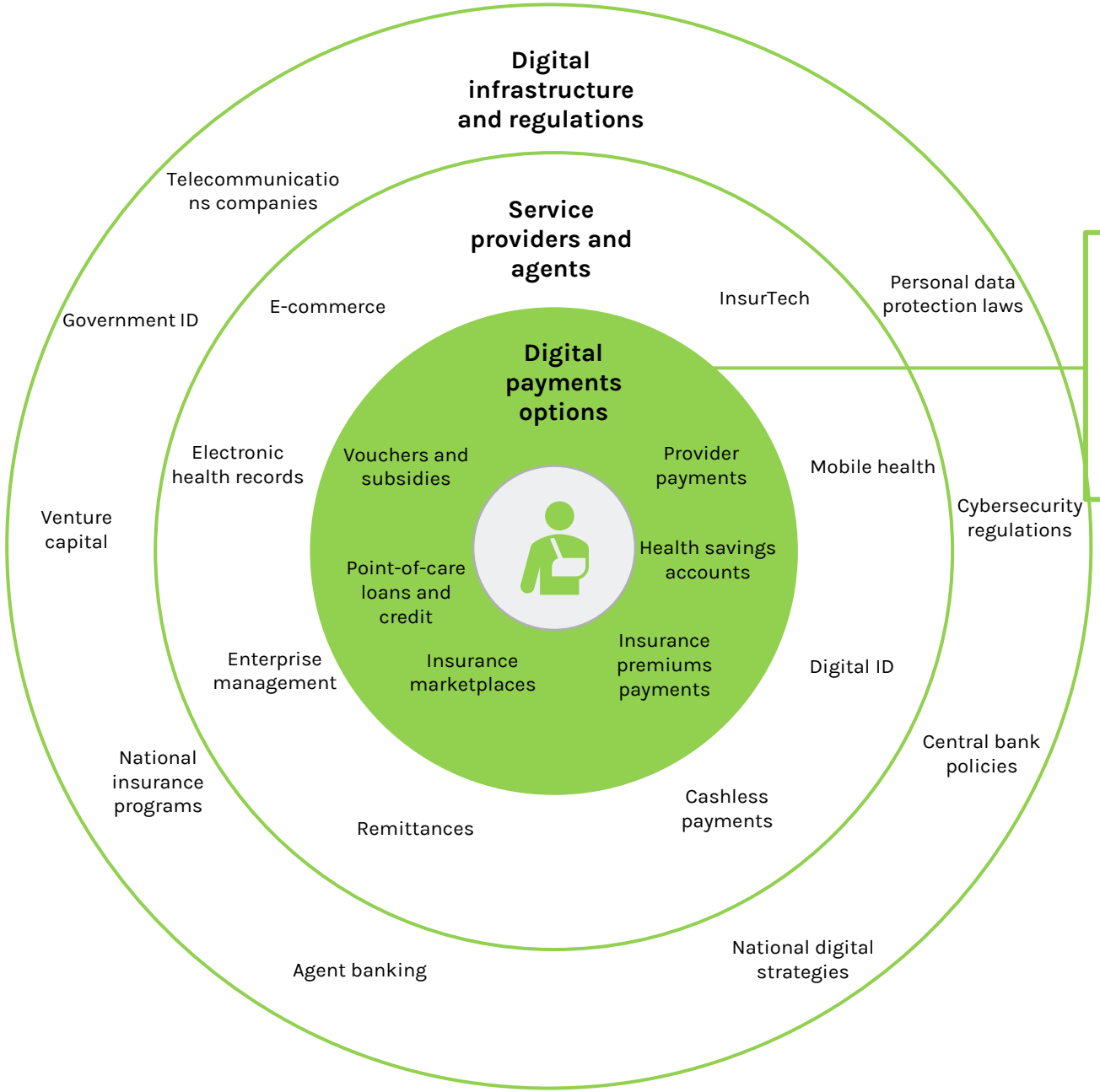
Payors

- Administrative cost savings
- More responsive systems and programs
- Automated management brings in greater efficiency, transparency, equity, and control in government programs
- Better (and more) data for health systems planning
- Fraud detection and prevention of leakage

DFS FOR HEALTH ECOSYSTEM

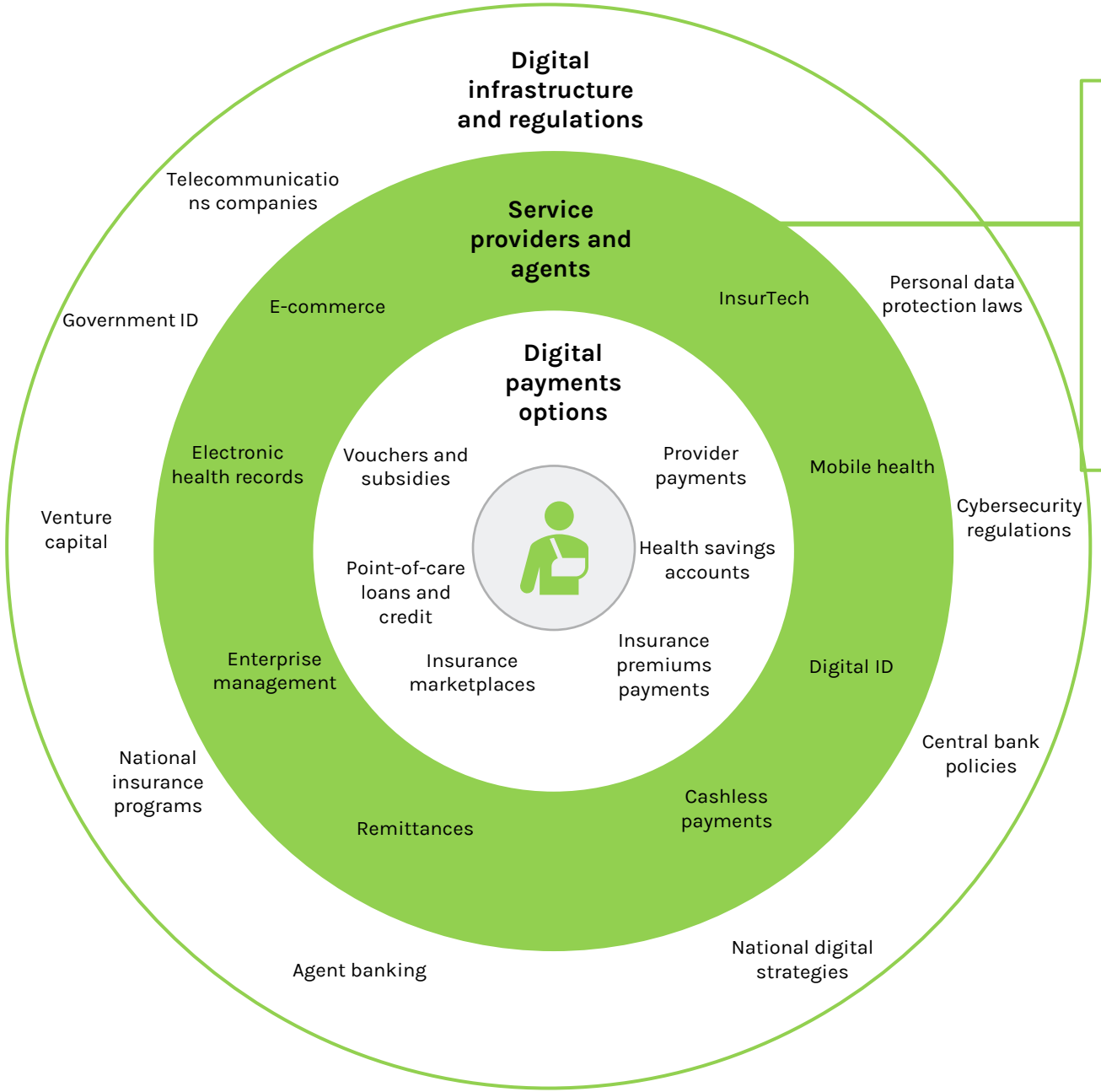


DFS FOR HEALTH ECOSYSTEM: DIGITAL PAYMENTS OPTIONS



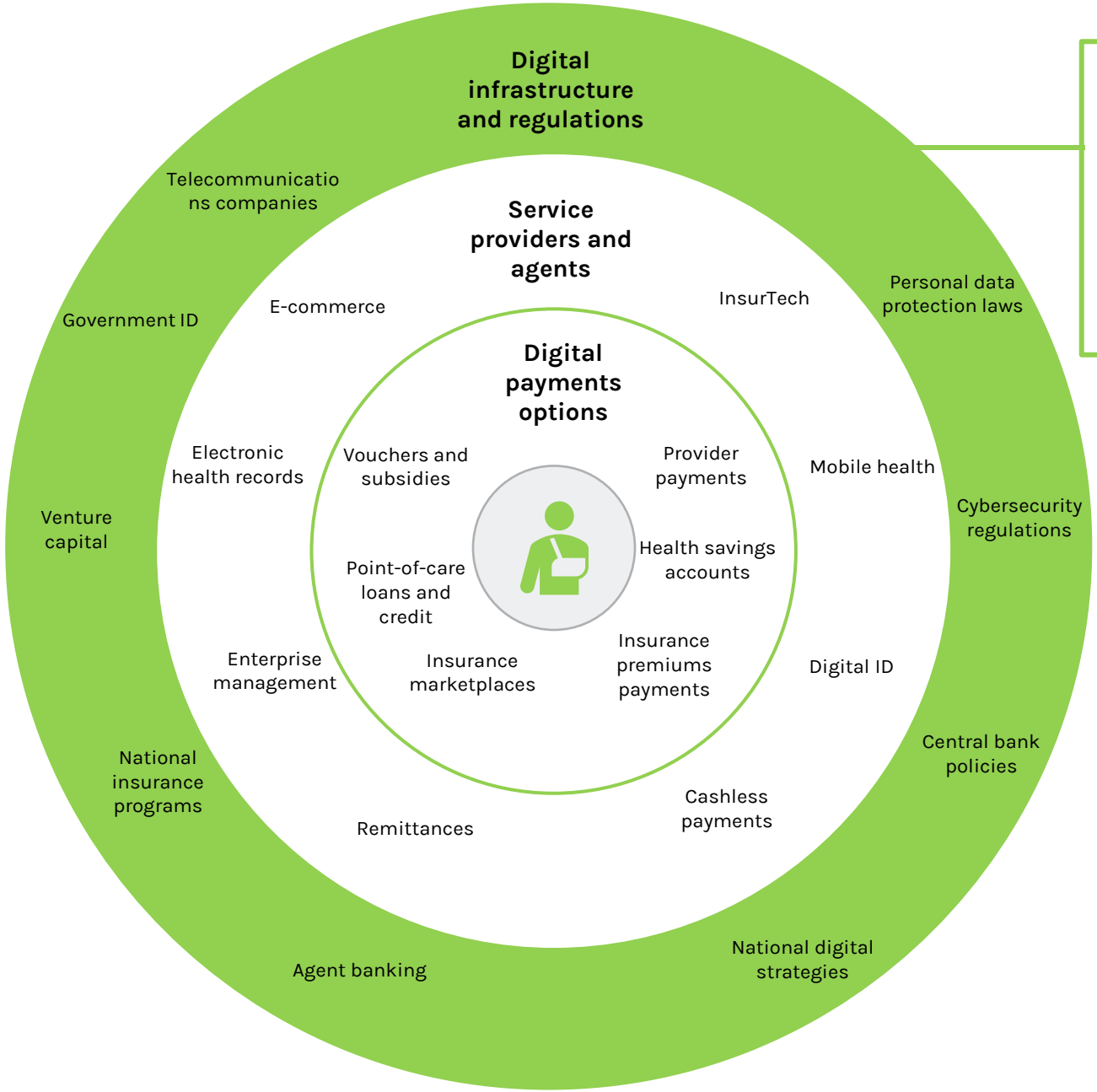
A digitally- and financially-aware patient is empowered with choices in how they pay for healthcare.

DFS FOR HEALTH ECOSYSTEM: SERVICE PROVIDERS AND AGENTS



Digital service providers enable easy-to-use, seamless, and transparent payments services between patients, providers, payors, suppliers, and government.

DFS FOR HEALTH ECOSYSTEM: DIGITAL INFRASTRUCTURE & REGULATIONS

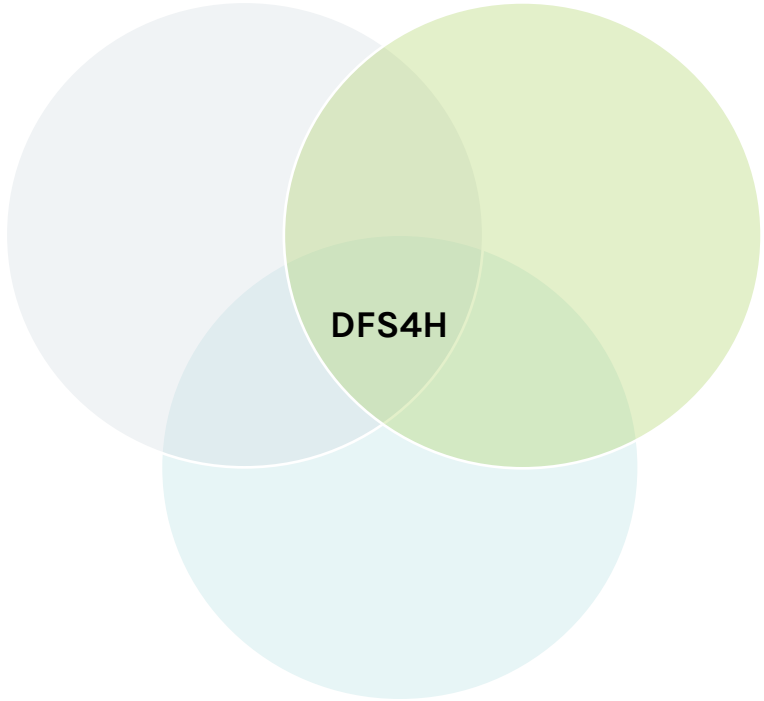


Government regulatory bodies, funding agencies, private sector investors and companies underpin advancements in DFS for health.

When **data** and **payments** move through the DFS for Health ecosystem **securely, efficiently, transparently,** and with **patient data protected**, national funding for health can focus on what is most important: **patient care**.

WHAT ARE DIGITAL FINANCIAL SERVICES FOR HEALTH?

Key Takeaways



- Digital financial services for health (DFS4H) models can be used as a tool to advance universal health coverage
- DFS4H models are built upon advancements in cashless payments and data storage and processing.
- They connect patients, providers, and payors in a seamless, transparent, and efficient way.
- The DFS4H regulatory environment protects patients while enabling innovation.
- They can result in increased healthcare consumption, financial protection, and health systems performance, ultimately leading to better health outcomes.

- Introduction & Learning Objectives
- Digital Financial Services in Healthcare
- Launching a DFS4H Project
- Pitfalls
- Success Stories
- Q&A

BUILDING A DFS FOR HEALTH SOLUTION

1. Identify and describe the problem statement (the health financing challenge to be solved)
2. Identify potential solutions
3. Identify and onboard potential partners from the ecosystem
4. Design, develop, launch, and grow in phases
5. Monitor performance and evaluate impact

1 Identify and describe the problem statement (the health financing challenge to be solved)

Health systems have many problems that need addressing. How do I know which problem to focus on?

Start with national insurance strategies: What are the largest gaps or challenges?

Meet with health service providers, policy planners and health financing experts

- Identify common themes and prioritize

Be able to answer:

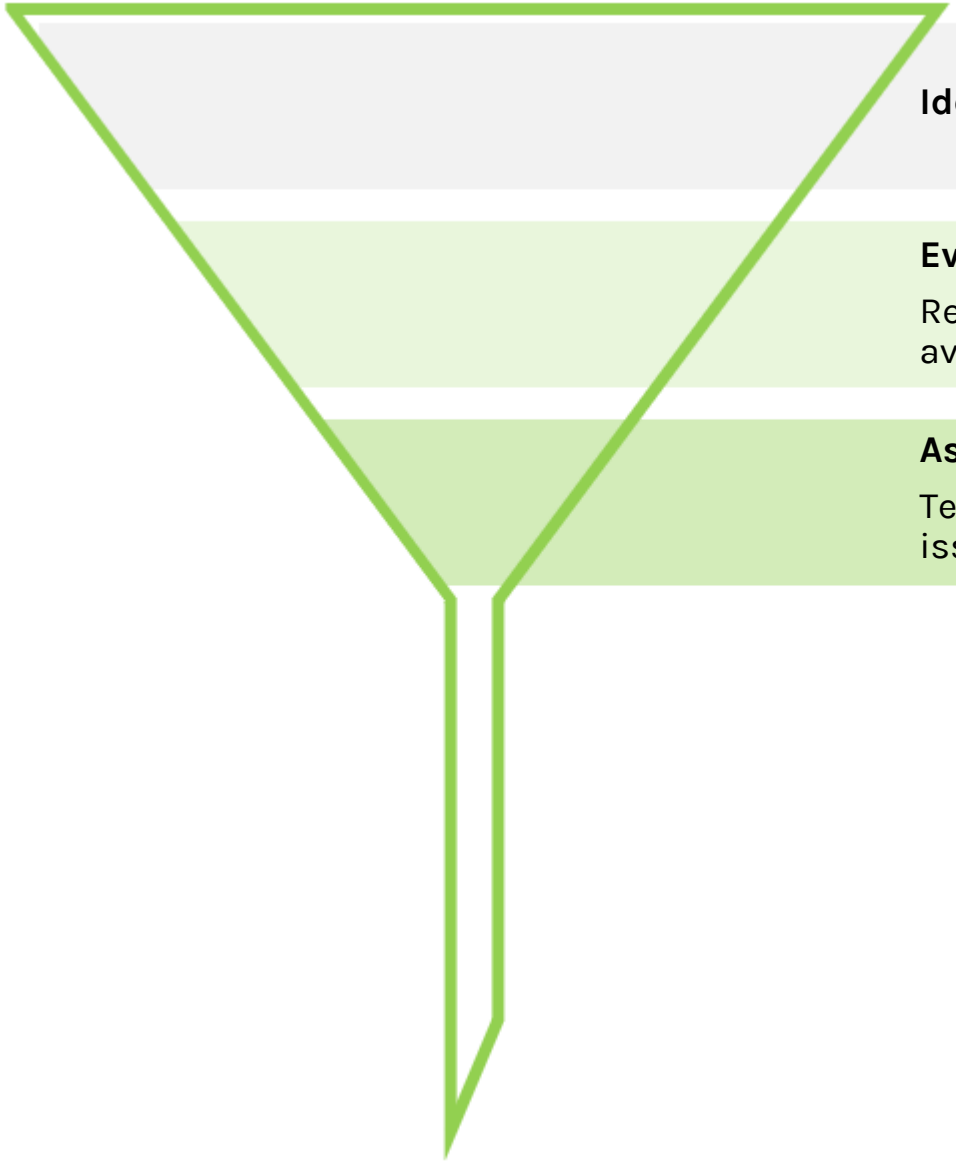
- Who are we solving for? Who else in the ecosystem is affected by the problem?
- What health services or products are involved?
- What are the information bottlenecks?
- What is the most paper-heavy aspect of the current payments processes?

How much detail should a problem statement include?

Invest sufficient time and resources to fully understand the problem to be addressed.

- Consult the published literature and datasets
- Conduct surveys, focus groups, and interviews of users and stakeholders

2 Identify potential solutions and ensure regulatory compliance



Identify a range of potential solutions based on the problem statement

Evaluate the solution fit according to the DFS4H ecosystem:

Regulatory environment, national insurance strategies, health systems structure, availability and adoption of DFS solutions, digital health strategies and innovation

Assess the feasibility of identified solutions and identify gaps in terms of:

Technology, partnerships, business model and incentives, regulatory compliance issues, user digital literacy

2 The DFS4H regulatory landscape:

Financial Regulations

- Online banking transactions
- Online fintech transactions (non-banking)
- Insurance regulatory standards

Healthcare Regulations

- Regulations for identifying the beneficiaries, providers, payers, facilities
- Centralized vs federated healthcare governance
- Health and product safety
- Accreditation and rating engine regulations

Digital Regulations

- Internet service providers, mobile and telecom regulations
- Digital architecture or platforms for public good

Data Governance

- Data privacy and data security
- Network security
- Physical security
- Data standardization and transaction formats

EXAMPLE

Regulatory approval for telehealth reimbursements in China during COVID-19 allowed more patients access to critical healthcare.

In China, key public-private partnerships were necessary to legitimize telehealth during COVID-19, resulting in the reimbursement of telehealth services through the national health insurance program.

Government entities licensed “internet hospitals,” or online hospitals that can provide medical consultations and prescriptions.

Regulators issued a series of policies to integrate online medical services and long-term prescriptions plans into medical insurance reimbursement allowances, facilitating the growth of medication delivery services, and implementing oversight programs to assure consumer safety and high-quality services.

3 Identify and onboard potential partners

Develop partnerships to fill product and services gaps, meet customer demand, and integrate health and financing solutions

Who can I partner with to reach and provide value for patients?

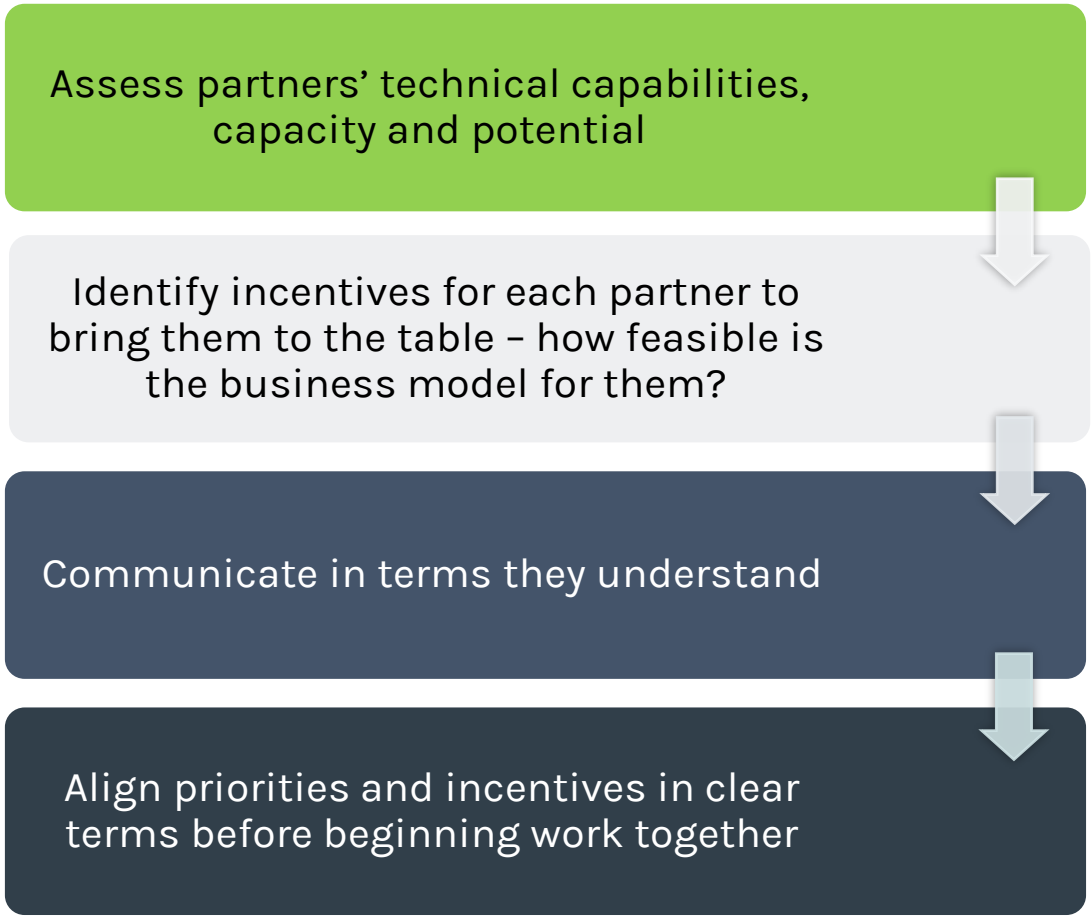
- Health services
- Payments and financial services
- Financial inclusion, health and social sector organizations
- Regulators

Who can I partner with to improve the provision and funding of care?

- Health services
- Payments and financial services
- Enterprise management platforms
- Logistical networks

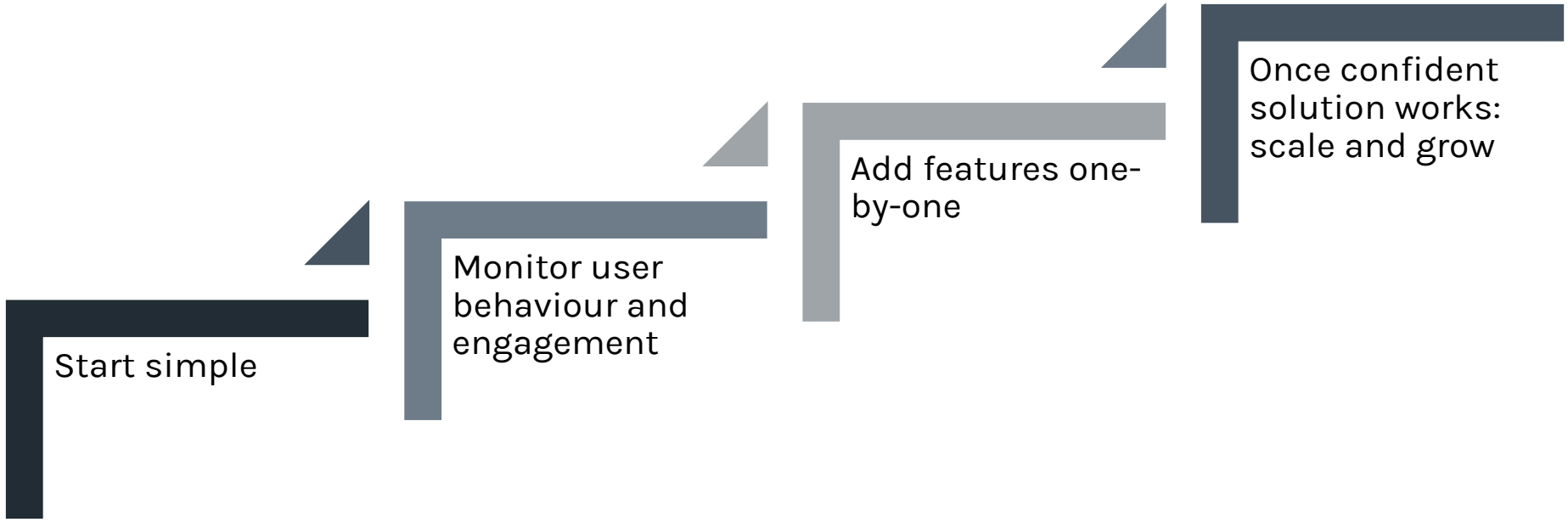
3 Identify and onboard potential partners (continued)

Align business interests, technical and team capabilities, and incentives to reach successful partnerships



4 Design, develop, launch and grow in phases

Start with the simplest features and ”minimum viable product”
After envisioning the final product, implement feature-by-feature
Pivot as necessary



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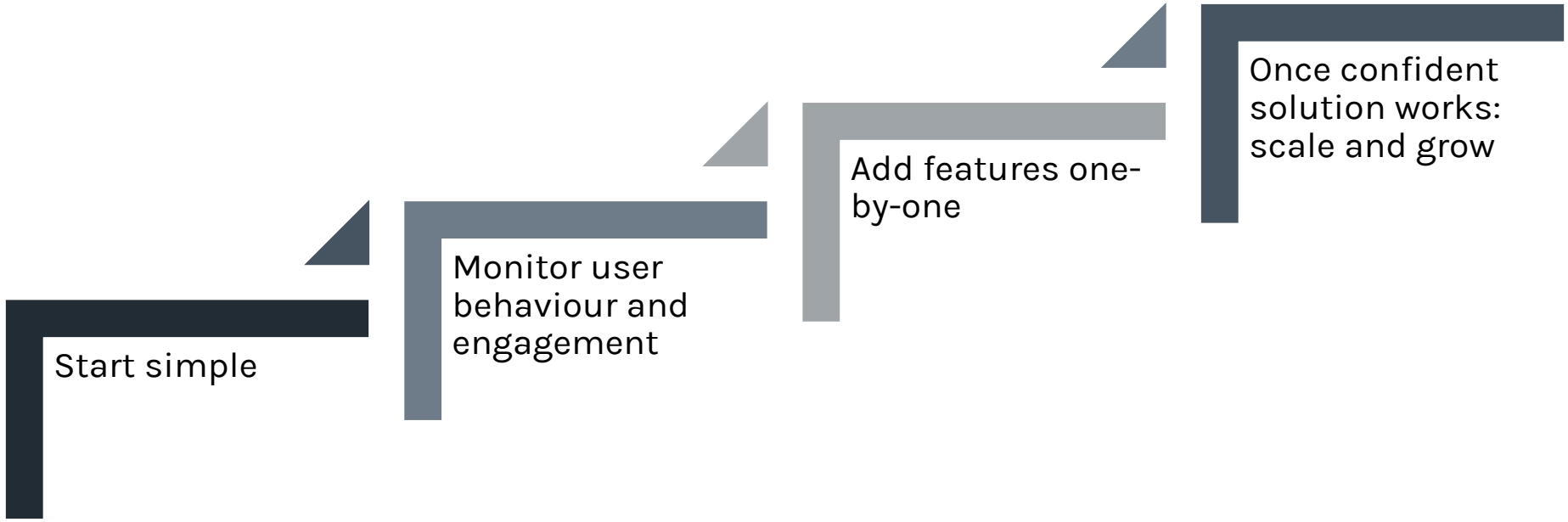

- Test assumptions -- customers’ AND partners’
- Design easy onboarding processes
- Include immediate benefits

4 Design, develop, launch and grow in phases (continued)

Start with the simplest features and ”minimum viable product”
After envisioning the final product, implement feature-by-feature
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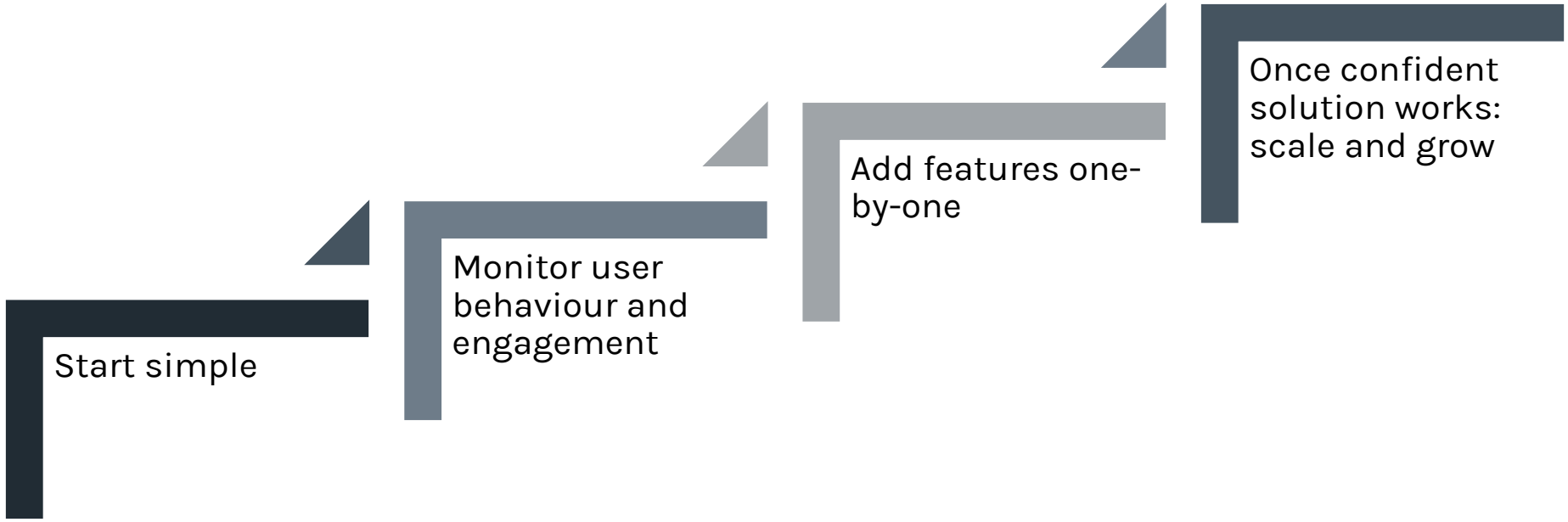

- Compare initiation vs. ongoing use- where are the points of user drop-off?
- Test incentives and tweak accordingly

4 Design, develop, launch and grow in phases (continued)

Start with the simplest features and ”minimum viable product”
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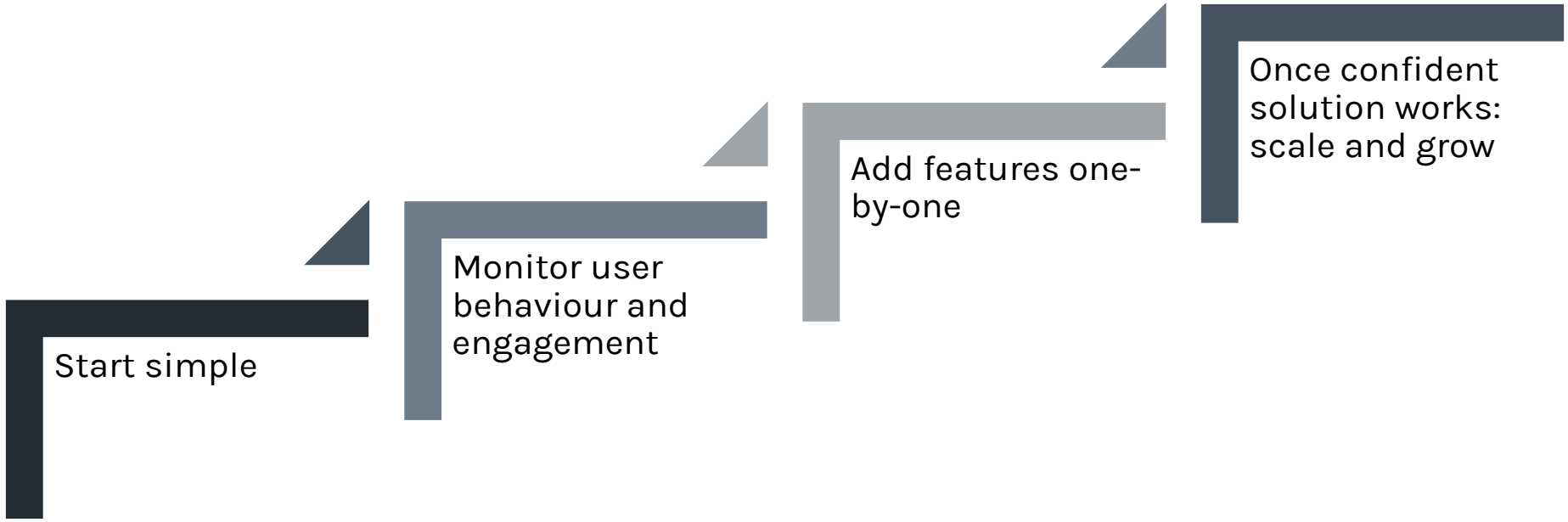
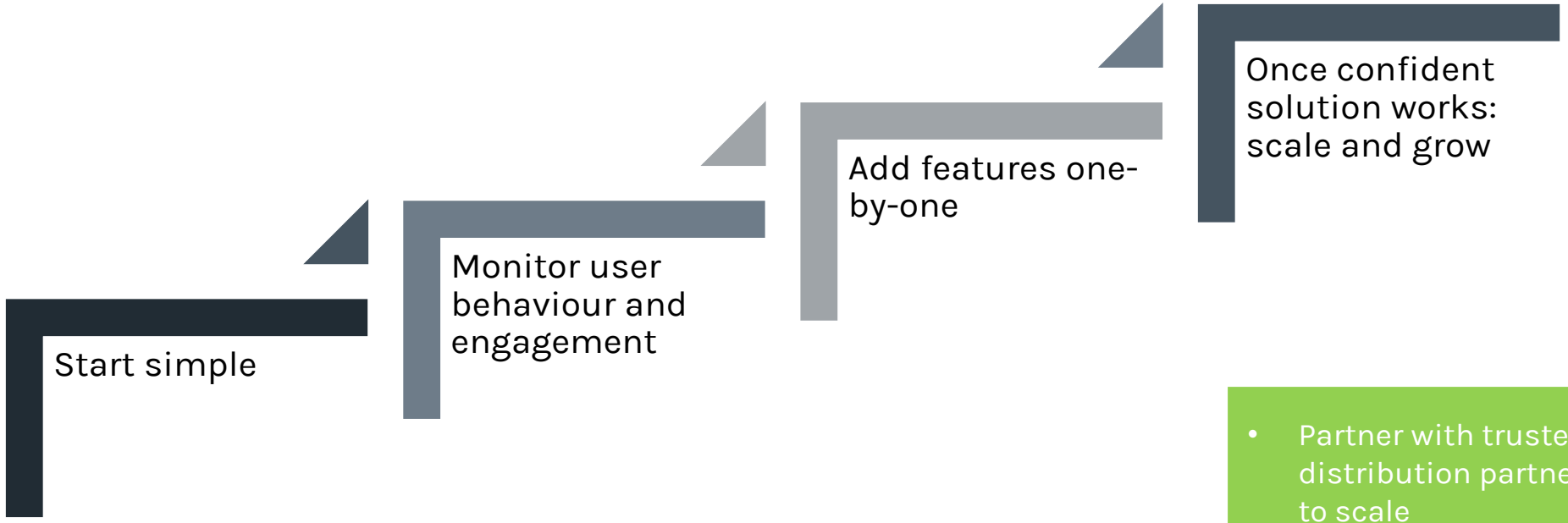


- Add services, capabilities or processes with each feature.
- Monitor that each feature works before launching the next one

4 Design, develop, launch and grow in phases (continued)

Start with the simplest features and ”minimum viable product”
After envisioning the final product, implement feature-by-feature
Pivot as necessary



- Partner with trusted distribution partners to scale
- Build internal team capabilities
- Invest in marketing and awareness

4 Design, develop, launch and grow in phases (continued)

Designing a service that must integrate with both financial services and healthcare systems through technologies that are new and emerging can be complex. Leverage existing technology when possible.

KEY TECHNOLOGY CONSIDERATIONS

IDENTITY MANAGEMENT IS CRITICAL

- Integration between national IDs and other sector-specific IDs such as payments IDs and health systems IDs
- Consent management needs to be ensured to protect patient privacy
- Data should be anonymized for analysis

ENSURE INTEROPERABILITY AT ALL LEVELS

- Semantic level – Standards
- Syntactic level – Formats
- Hardware level – Machines
- Network level – Connectivity
- Organization level – Facilities

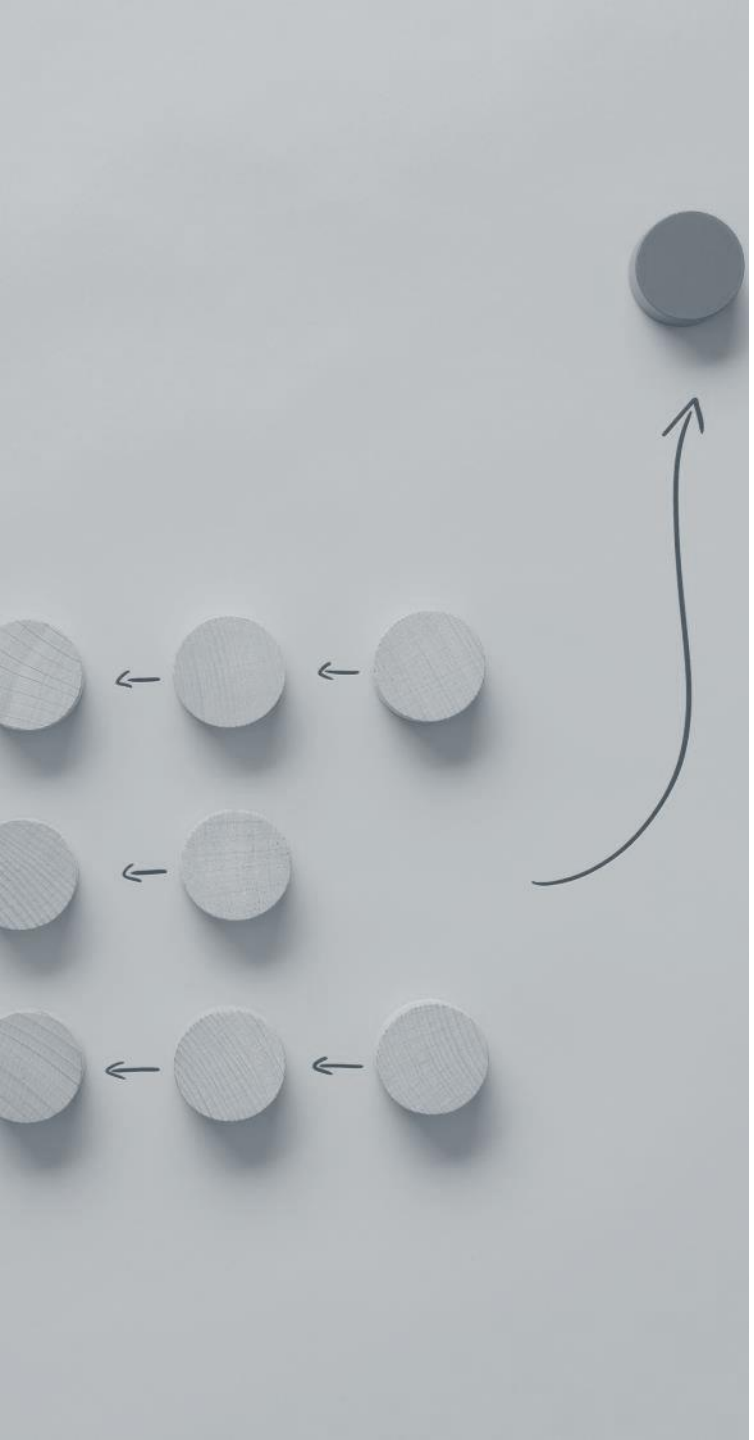
USE SCALABLE TECHNOLOGIES

- Use mobile-first technologies
- Build on the cloud for lower cost of ownership and improved accessibility
- Incorporate artificial intelligence and Internet of Things (IoT) point-of-care and point-of-sale devices or automation to reduce data processing costs

5 Monitor performance and evaluate impact

Decide on monitoring indicators and procedures, including available datasets from main implementing partners, before launch. Be clear on intended impact of the model.

	Questions to be answered	Data	Approach	Timeframe
User perception	Is the user aware of the solution and is it easy to use? Does the user find the solution to be valuable? Which features are most used, when and by whom? Where does use drop off?	User adoption data (downloads, purchases) and use data (activity and consistent use– e.g. login frequency, transactions, forms completed/sent)	Continuous data monitoring, complemented by user interviews and product tests, feeds into product development and growth plans	Start immediately from product launch; monitor user data on at least a weekly or monthly basis
Benefits	Is the DFS4H model increasing use of health services, financial protection, quality of care, and/or health systems performance?	Healthcare consumption data. Public and private insurance enrollment. Provider investments in staff, equipment, and facilities. Human resources time costs. Incidences of fraud detected.	Conduct reviews on a regular basis to track growth in outcome measurements or barriers to success. Ensure that appropriate use of data sharing is part of partnership agreements.	Medium-term (at least 12 months from launch to evidence of outcomes). Monthly or quarterly reviews from launch date, dependent on the stage of model implementation.
Impact	Is the DFS4H model resulting in improved health and reductions in poverty?	Patient health records, % catastrophic healthcare expenditures, non-health expenditures during a health event	Third party evaluation	Long-term (>18 months from launch) to demonstrate impact on the health– including financial health– of a population.



BUILDING A DFS FOR HEALTH SOLUTION
Key Takeaways

- Have a well-defined problem statement
- Identify solutions based on feasibility and impact
- Partner to create a more holistic solution
- Start simple and plan for scalability
- Monitor frequently for user-centered, evaluate for impact

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POTENTIAL CHALLENGES IN THE USE OF DFS FOR HEALTH

Systemic Challenges

- Poor quality or lack of adequate ICT infrastructure, especially in rural areas
- No or limited interoperability between government, other public and private sector partners and healthcare organizations
- Limited budgets and policies supporting the transformation

User-related Challenges

- Low financial awareness and consumer apathy
- Low digital literacy and resistance to change both from program managers and users
- Lack of adequate documentation and ID, credit history
- Unreliable payment channels

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SUCCESS STORIES

What & Why	**HealthHub** Portal and mobile app for citizens to 1. View evidence-based health and wellness information, 2. Access health records for self and loved ones, and 3. Perform transactions across public healthcare clusters such as appointments, bill payments and refilling of medication. Aims to make Singaporeans take greater ownership of their health and wellness.
When	Launched on October 18th, 2015
Where	Singapore
Who	Developed by the Ministry of Health and the Health Promotion Board for Singaporean citizens and residents, operated by the government-owned IHiS.

DFS4H Features	Users can • Provide financial consent for the provision and delivery of government subsidies, view current health subsidy balance • Pay for medical needs and expenses • Request prescription refills and renewals

Conceptualized in 2013 as a one-stop portal and mobile app for citizens to check their health data and keep track of appointments.

Design
Conducted focus groups between parents-to-be; parents of young kids; the health conscious; those diagnosed with a condition; and the recently screened during the design phase.

Challenges:
1. Simplifying medical information sharing and medical record retrieval
2. Integration of data across the many IT systems in the healthcare sector

Patient engagement
1. **Make healthy behaviour attractive**: Offer deals on health and wellness
2. **Rewards:** Users can accumulate Healthpoints by sharing site-based media and information on social media. Healthpoints can be used to offset grocery bills or redeem vouchers.

In 2022:
6 million+ Singapore residents can check their COVID-19 test results and vaccination records on the app.

SUCCESS STORIES (CONTINUED)

	BIMA
What & Why	Mobile-delivered, subscription-based insurance and on-demand health services targeted at extending financial protection and healthcare to underserved families in emerging markets.
When	Launched in 2010
Where	Ghana, Tanzania, Bangladesh, Cambodia, Indonesia, Malaysia, Pakistan, Philippines, Sri Lanka
Who	MILVIK BIMA is a Sweden-headquartered private company servicing underserved families in emerging markets. They typically live on less than $10 per day and are at high risk of illness or injury. **75% customers are accessing insurance services for the very first time.**

DFS4H Features	Users can avail of the following services • Health wallet • Life insurance • Bundled insurance and digital health packages offering unlimited telemedicine access, medication support, personalised health records, insurance cover for hospital stays

Launched in 2010 in Ghana to bring **Family Care insurance** to citizens in partnership with Millicom Ghana, a leading telecom provider in Latin America and Africa.

Design

Established partnerships with mobile money providers, mobile operators and leading insurance underwriters leveraging their distribution network and brand

Easy registration

Easy payment through multiple payment channels

Simple, paperless claim process with payments processed in 3 days

Challenges:

1. Low consumer digital literacy
2. Low awareness of the need to plan for healthcare-related financial needs
3. Friction related to payment channels
4. High costs of mobile data

Patient engagement

1. Instant benefits on sign-up
2. User education on taking care of their health and the need and use of insurance products
3. Access to high quality health information on user's chosen topics
4. Consumers earn points for paying their subscriptions on time which gives them discounts
5. Reward points for healthy behaviour

In 2022:
25 million active consumers worldwide.
30+ mobile wallets/payment channels, 2.5 million+ medical consultations

Q & A

Thank You