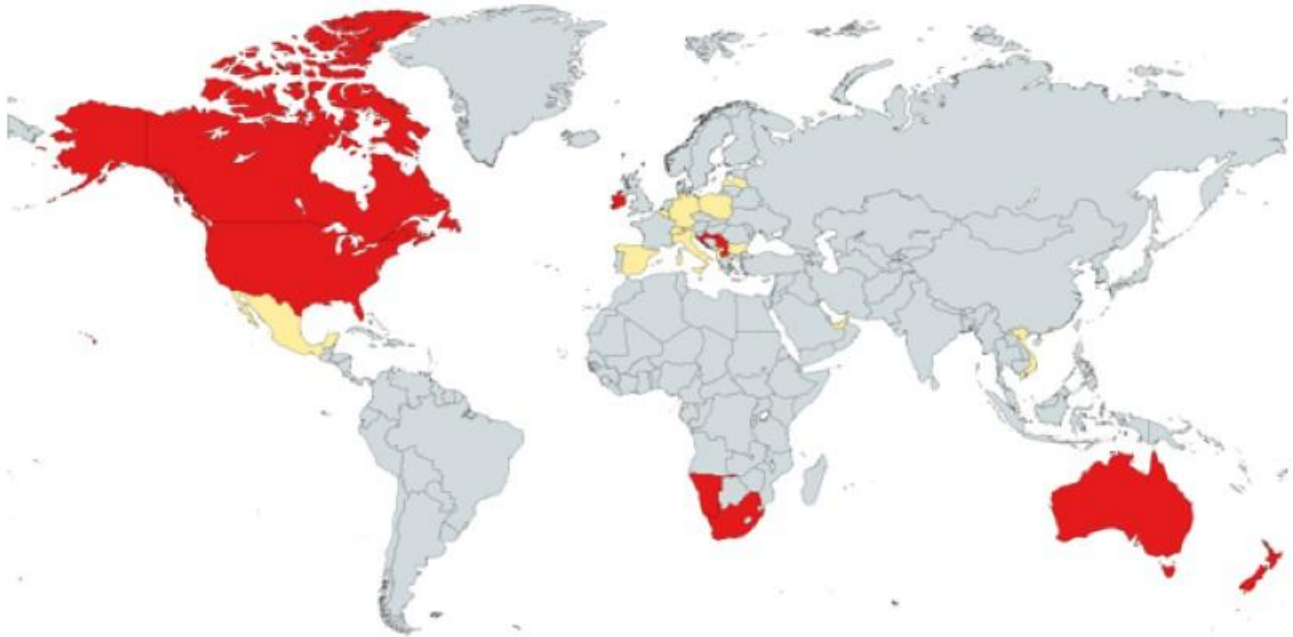
# Introduction to Sorsix and Pinga

***Solving Human Health***

SORSIX

# Introduction to Sorsix

## Solving Human Health



### Company

- HQ in Aus
- Main development office in Skopje
- 160+ headcount, growing, 80% engineers
- Focused on healthcare
- Global customer base (map: red = customers; yellow = partners)

### Products

- Pinga – configurable platform for healthcare delivery, 'Health Operating System'
    - Productised modules include full EHR, EMR, HIS/LIS/RIS, Population Registers, Clinical Pathways
    - All healthcare verticals covered by at least one deployment
- Vertical-specific sub-products based on Pinga configurations (e.g. dedicated Radiology solution, LIS, etc)
- Only product with **nation-scale end-to-end deployments globally**

# Some numbers

## The healthcare flow

### Global activity

- Lifetime usage: over 2.5bn clinical interactions processed by Pinga
- Approx. 100k unique users per day, majority clinicians
- Over 600 integrated software applications

### National scale and innovation

- Sorsix 'started big'
    - First Pinga deployment was a full-country system
    - This experience powers our large private deployments also
- We delivered the first functional e-referral in Australia (as well as in Macedonia and Serbia)
- The system has functioned with five-nines uptime in Macedonia over the past 12 years and continues to operate

# Pinga for Public health

# National transformation

## The Macedonia story

### Rapid outcomes

- Full-country, single EHR active in **just 12 months** (for Serbia, it was **6 months**)
- A full medical record for **every citizen**
- A full **population register for vaccination and immunization**
- Real-time data enabling **infectious disease management**
- Real-time **prescription usage data**

### National scale and innovation

- The product scales to **whole-country deployments.** The system works in any system and at any scale
    - Private clinic deployments
    - Full public system
    - Single-program deployments (e.g. vaccination in Macedonia; breast screening in NZ)
- Over 100k daily users worldwide

# ‘National Health Operating System’

## A new idea for healthcare

### What if we designed the ‘healthcare tech stack’ from scratch?

- Modern healthcare is delivered through a maze of systems, often siloed or lacking integration
- We propose a fundamental reset of the fabric – **build the system as it should have been built**
- This is possible while **maintaining backwards compatibility**
    - Almost all legacy software does have some integration capability
    - Starting with the right base enables the parts to ‘snap in place’ as the system is built out

### We’ve done it before

- Our company is the only ones to deliver an integrated healthcare backbone with patient application, at a **whole-country scale**, with over a decade in production
- We can go live **fast – deployments take months, not years**
- Watch a visualized rollout with real data here https://serbia-rollout.sorsix.com/

# The ‘Old Way’ – current market practice

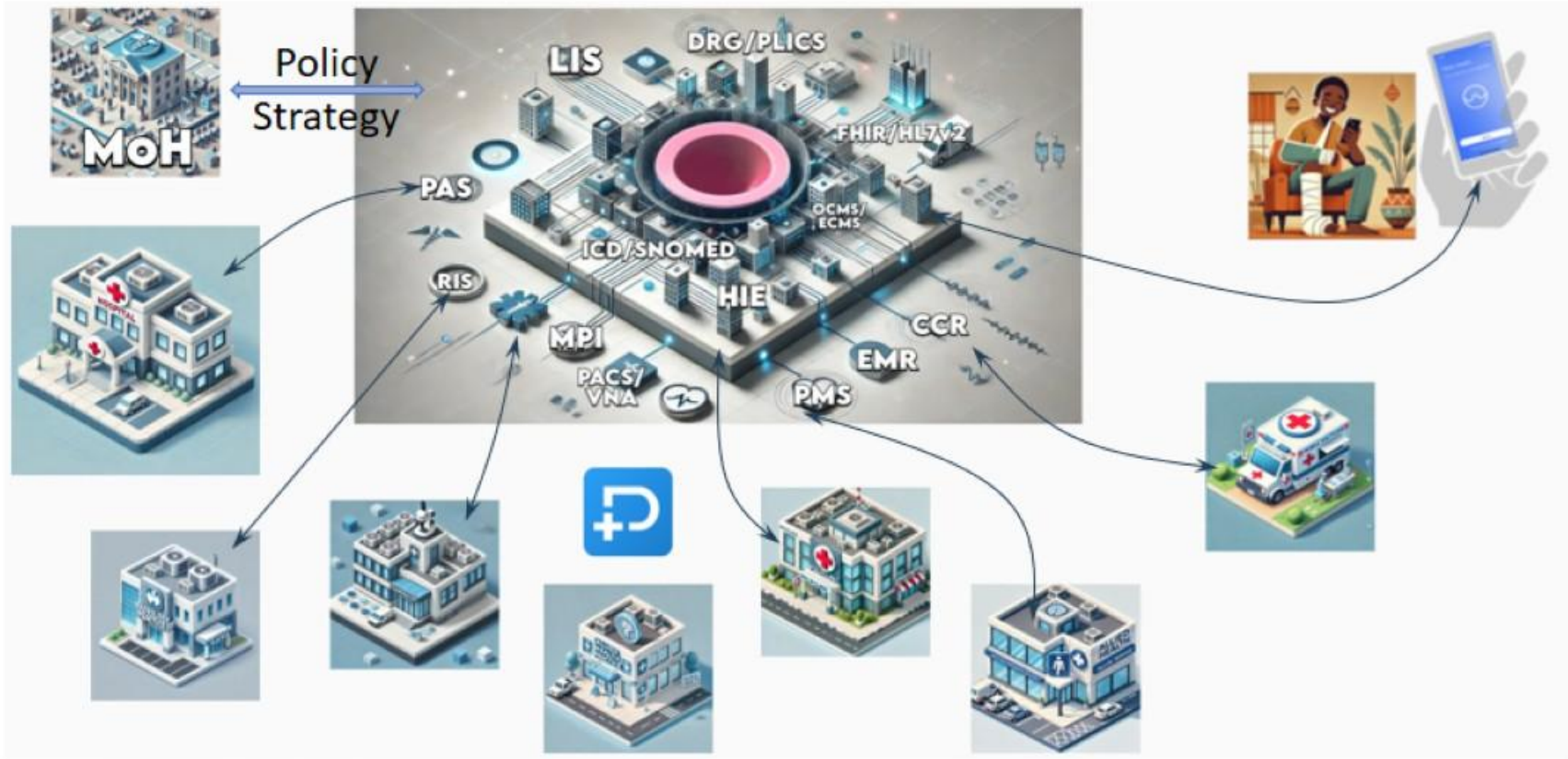
## A visualization – 1/2


**Legacy Mess**

- A combination of legacy concepts leads to a complex ‘acronym word salad’
- Each system **has to integrate with *each other system*** – the number of integrations and failure points ***increases without bound*** as the system grows
- Attempts to create central repositories just add more integration need

# ‘National Health Operating System’ - NHOS

## A visualization – 2/2




**Pinga and the Future**

- Every functionality in the ‘acronym salad’ is still provided by the NHOS
- All facilities **integrate with a single fundamental backbone – the NHOS**
- All facilities **without integration can use the system’s native interfaces**

# All nations should have an NHOS backbone

## How it effectively works

Patients engage with curated content and data collection is automated

Doctors can work in their EMR, in Pinga's EMR interface, or in the community

**NHOS (Pinga)**

Integrations build a source of truth in the Pinga backbone

HL7 integration
Legacy software

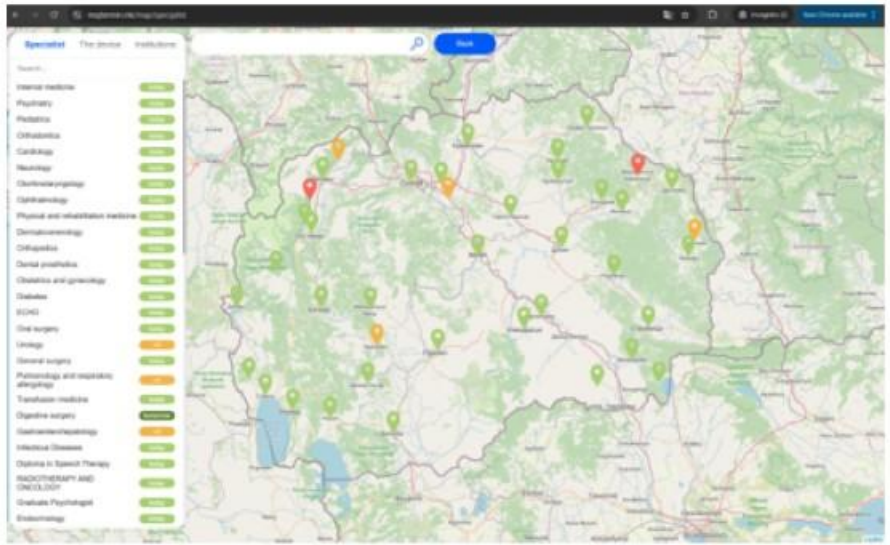
FHIR + API integration

HL7 integration
Legacy software

Modern cloud PMS, API integration

# Short demonstration

## National deployments



### North Macedonia

- Integrated diaries across the country
- All referrals are electronic, doctors/nurses/receptionists all schedule online
- National system and live stats

### Serbia

- Integrated diaries across the country
- All referrals are electronic, doctors/nurses/receptionists all schedule online
- National system and live stats

### NALHN

- Pathway Builder-driven e-referrals, forms, and patient interaction
- Demonstration of self-management features

# The NHOS EHR elements

## A full record

- National EHR
  - Referrals for all 2º and 3º care
  - RIS/LIS for ministry hospitals
  - Specialist software for ministry doctors
  - Prescriptions
  - Daily medical reports
  - Sick leave
- Administration
  - National registers
    - Cancer
    - Orthopedic appliances
    - Transplantation
    - Vaccination and immunization
    - Equipment
  - Waiting lists

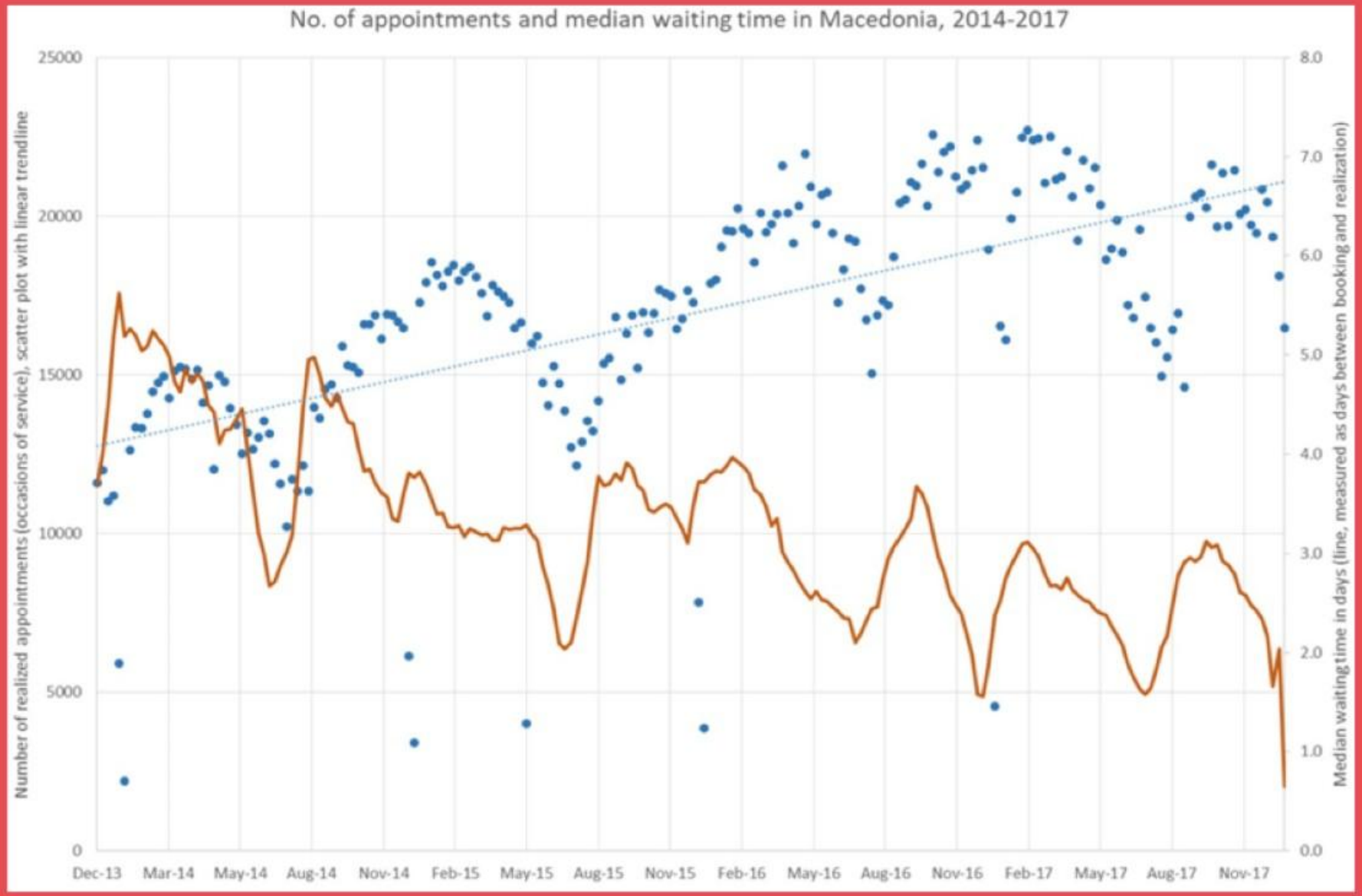
## Integrated management

- Basic EMR/PMS for public doctors and institutions
- Basic HIS for public institutions
- Basic pathways for referrals and treatment plans
- State formulary
- Notification engine
- Training
- Credentialling
- Performance-based pay system

## Specialised modules

- Dedicated diabetes and endocrinology module
- Surgical waitlist and planning tool
- Transplantation waiting lists
- Immunization register and planning
- Pregnancy management/newborn registration

# Pinga – impact

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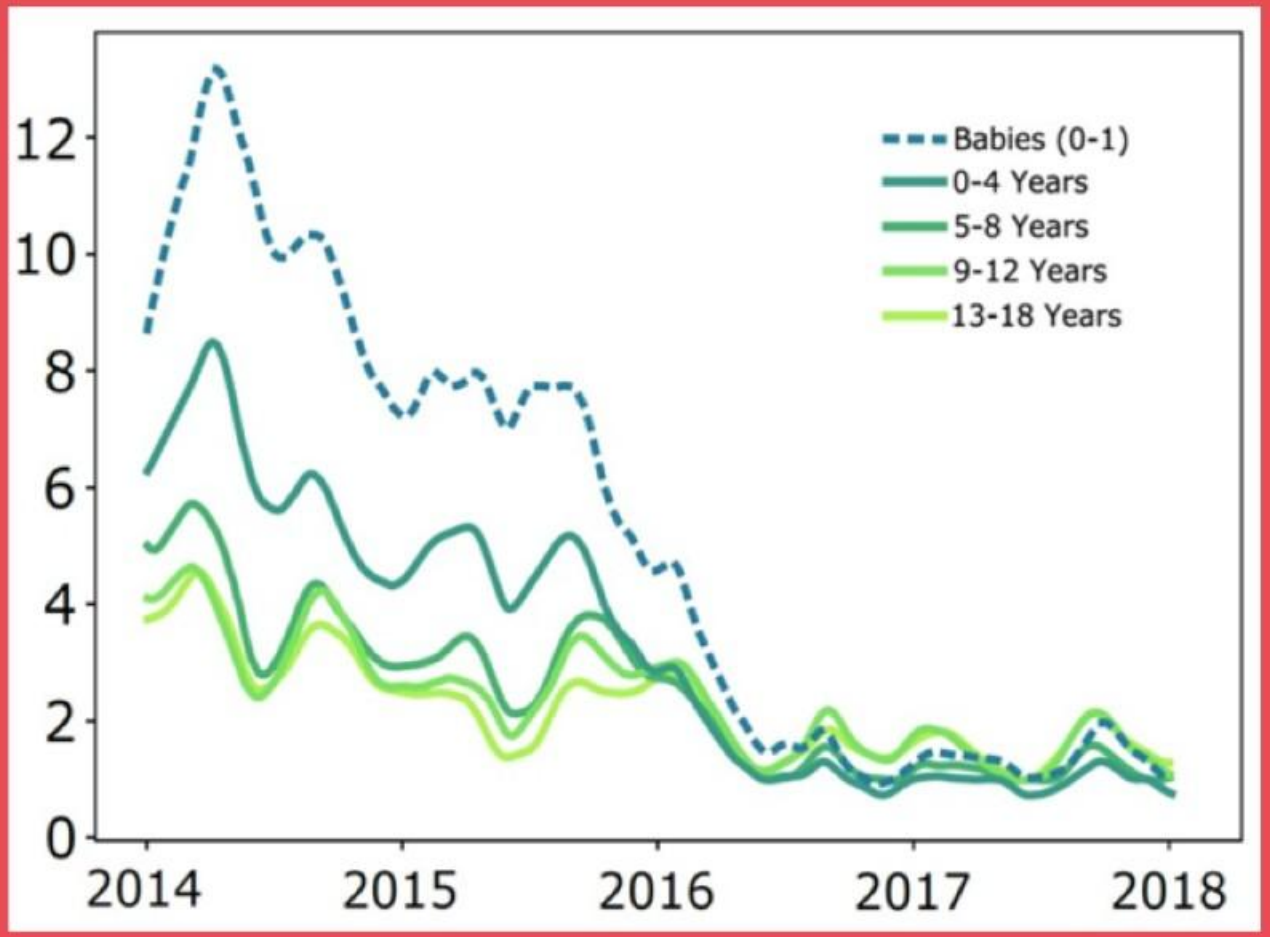
# Pinga – impact




*Wait time for pediatric oncology, Macedonia 2014-2018*

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# Thank you