ARCHIMEDICX

Hospital scoring, discovery & booking platform

SMART RANKINGS. WORLDWIDE PROCEDURES.

$4M Startup. HIPAA-compliant.



Emilian Manolache

Senior Full-Stack Engineer & SaaS Architect | End-to-End

End-to-End: Full-stack development / Scoring engine implementation / Patient and hospital workflows

2023

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PLATFORM REACH

HOSPITAL DISCOVERY.
WORLDWIDE REACH.

48,062

worldwide procedures

$4M

received in funding
by Archimedicx

342

hospitals

25

countries

251

unique procedures

THREE AUDIENCES.
ONE CONNECTED PLATFORM.

I connected advanced scoring to patient discovery, hospital coordination and administration.

Patients

Discover providers.
Compare and save.
Inquire and coordinate.

Hospital teams

Review inquiries.
Reply with context.
Manage booking records.

Administrators

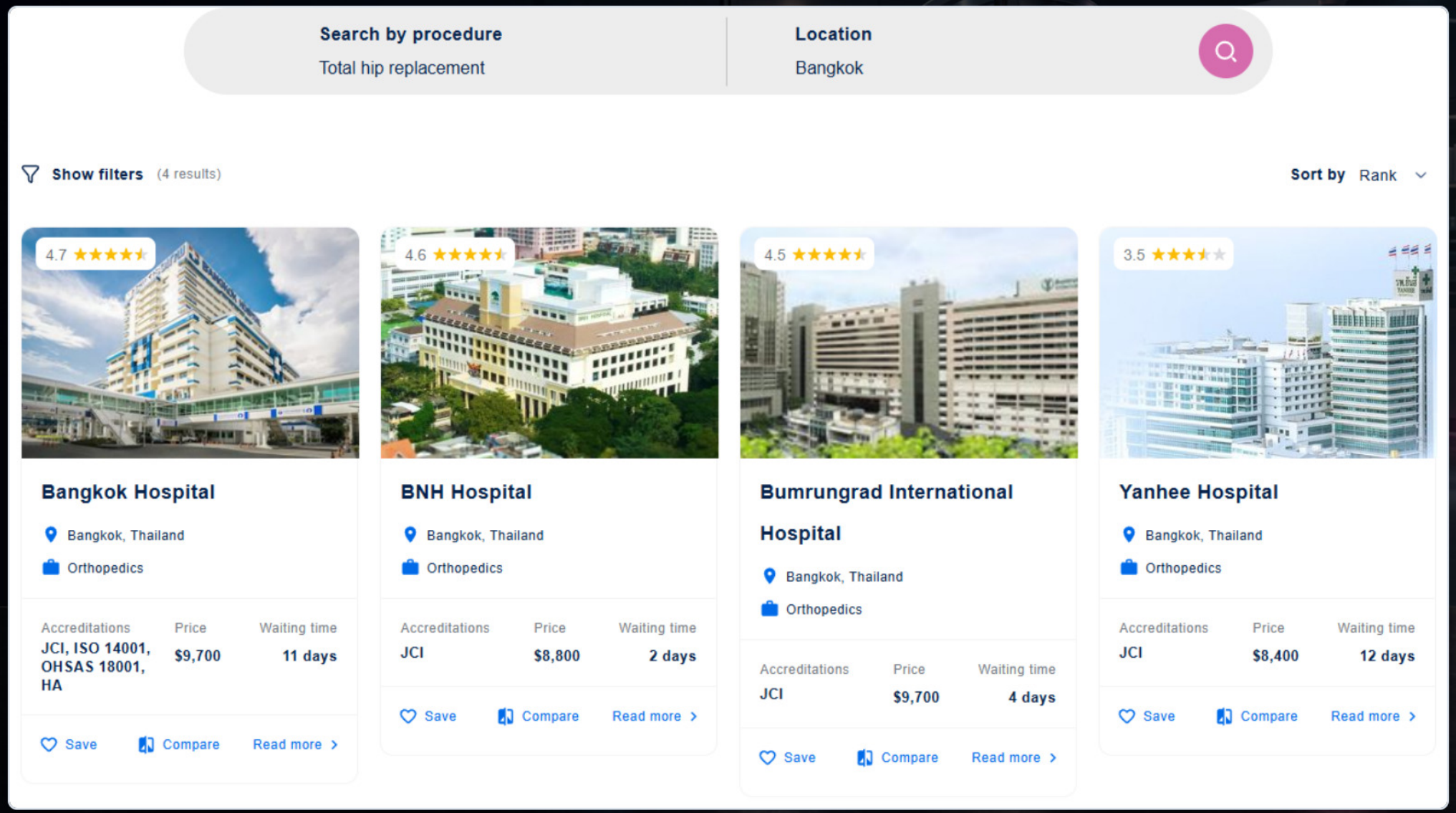
Maintain provider data.
Run score calculations.
Onboard hospital managers.

Shared provider, scoring and coordination data

Deployed, HIPAA-compliant platform

PROCEDURE-FIRST DISCOVERY

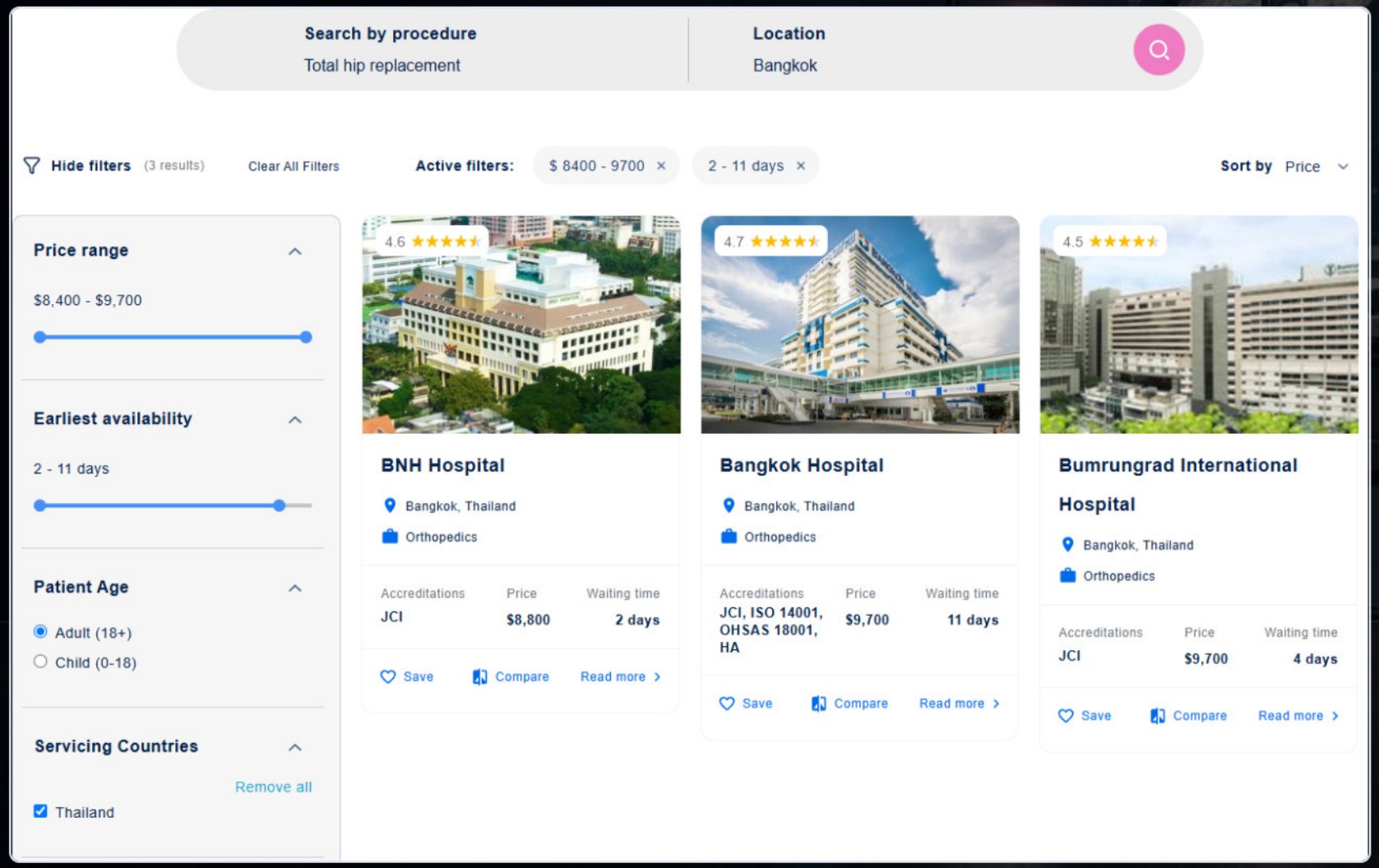
Search by treatment and location, then explore ranked providers with practical details.



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PATIENT FILTERS

MAKE THE SHORTLIST FIT THE PATIENT



PRICE

Set a budget range.

WAITING TIME

Find suitable availability.

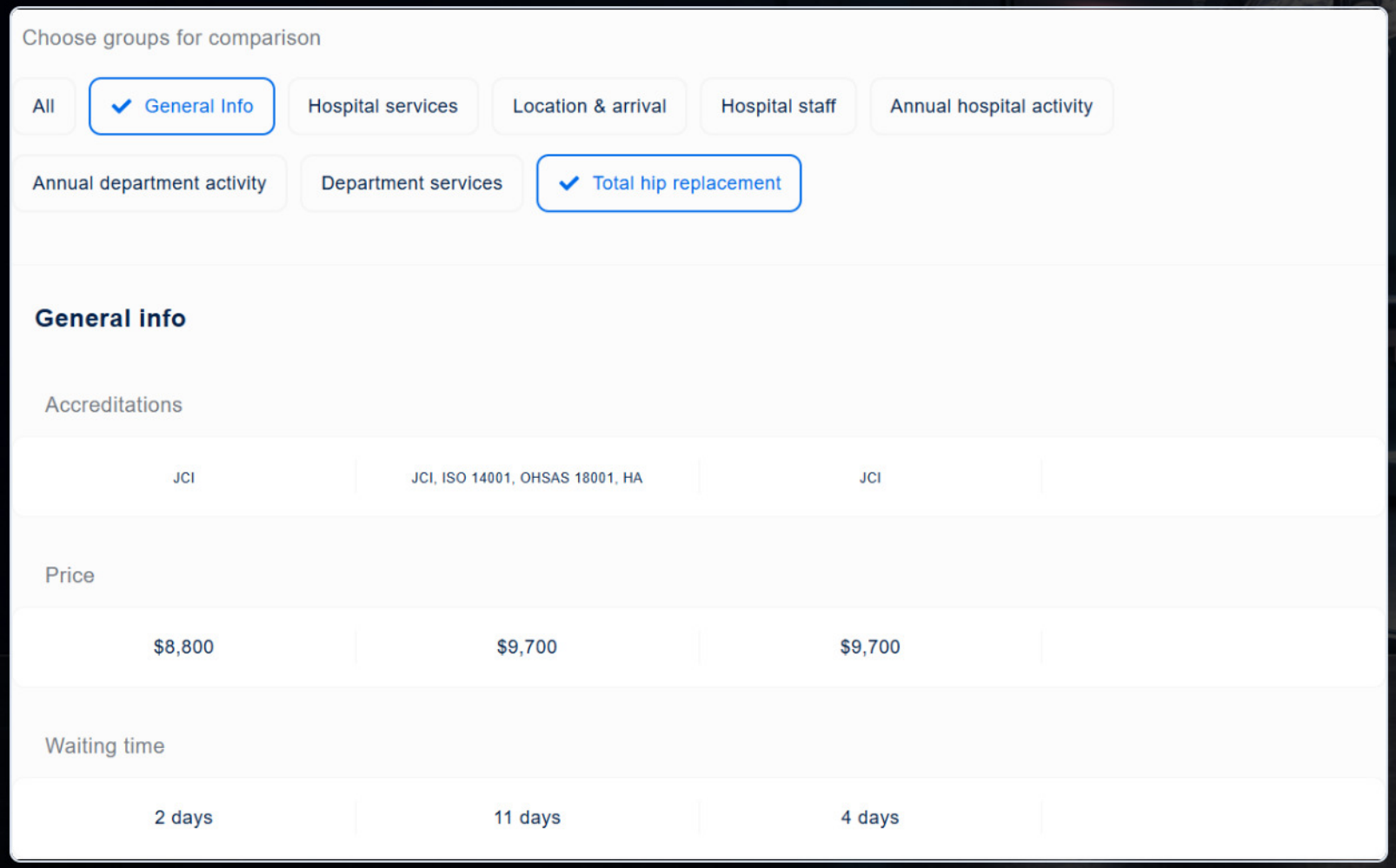
PREFERENCES

Narrow country and patient-age options.

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PROVIDER COMPARISON

COMPARE THE DETAILS BEHIND THE RANK



2-4

providers side by side

Accreditation

Procedure price

Waiting time

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HOSPITAL PROFILES

THE PROVIDER.
THE PROCEDURE. THE DETAILS.

Hospital imagery and clinical context sit alongside price, waiting time and next-step actions.



Bangkok Hospital

Bangkok, Thailand

Orthopedics: Total Hip Replacement

Accreditations	Price	Waiting time
JCI, ISO 14001, OHSAS 18001, HA	$9,700	11 days

Save Compare Share

Explore the profile

Save or compare

Start an inquiry

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DESKTOP AND MOBILE

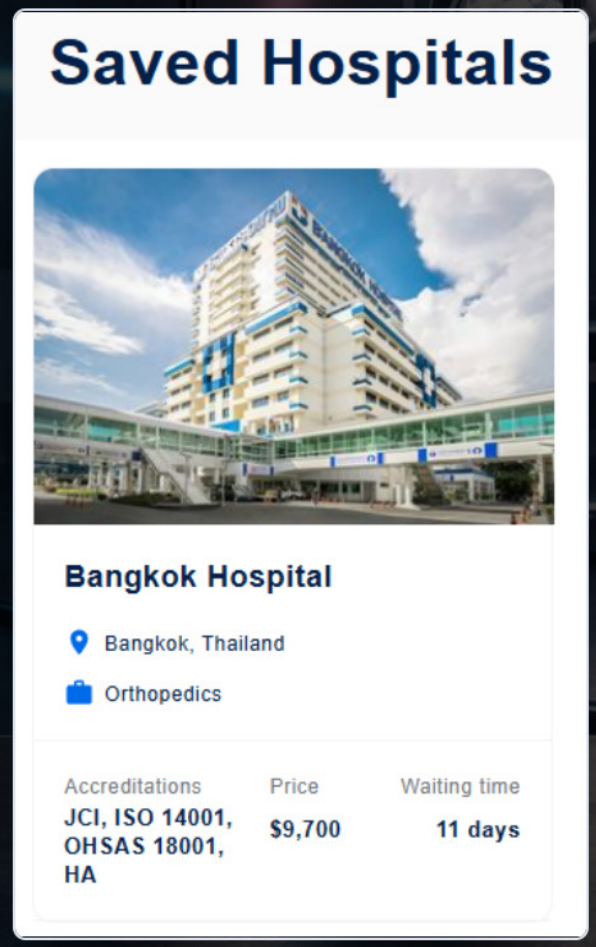
DISCOVERY THAT TRAVELS WITH THE PATIENT

RESPONSIVE BY DESIGN

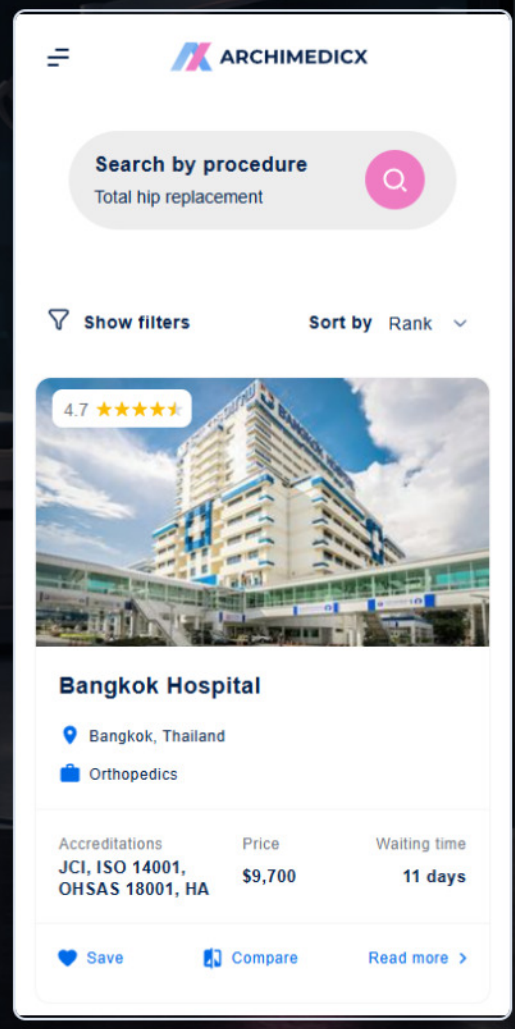
Search, filter and explore providers on mobile.

A SHORTLIST TO RETURN TO

Saved hospitals persist across visits, keeping the next step within reach.



Saved providers



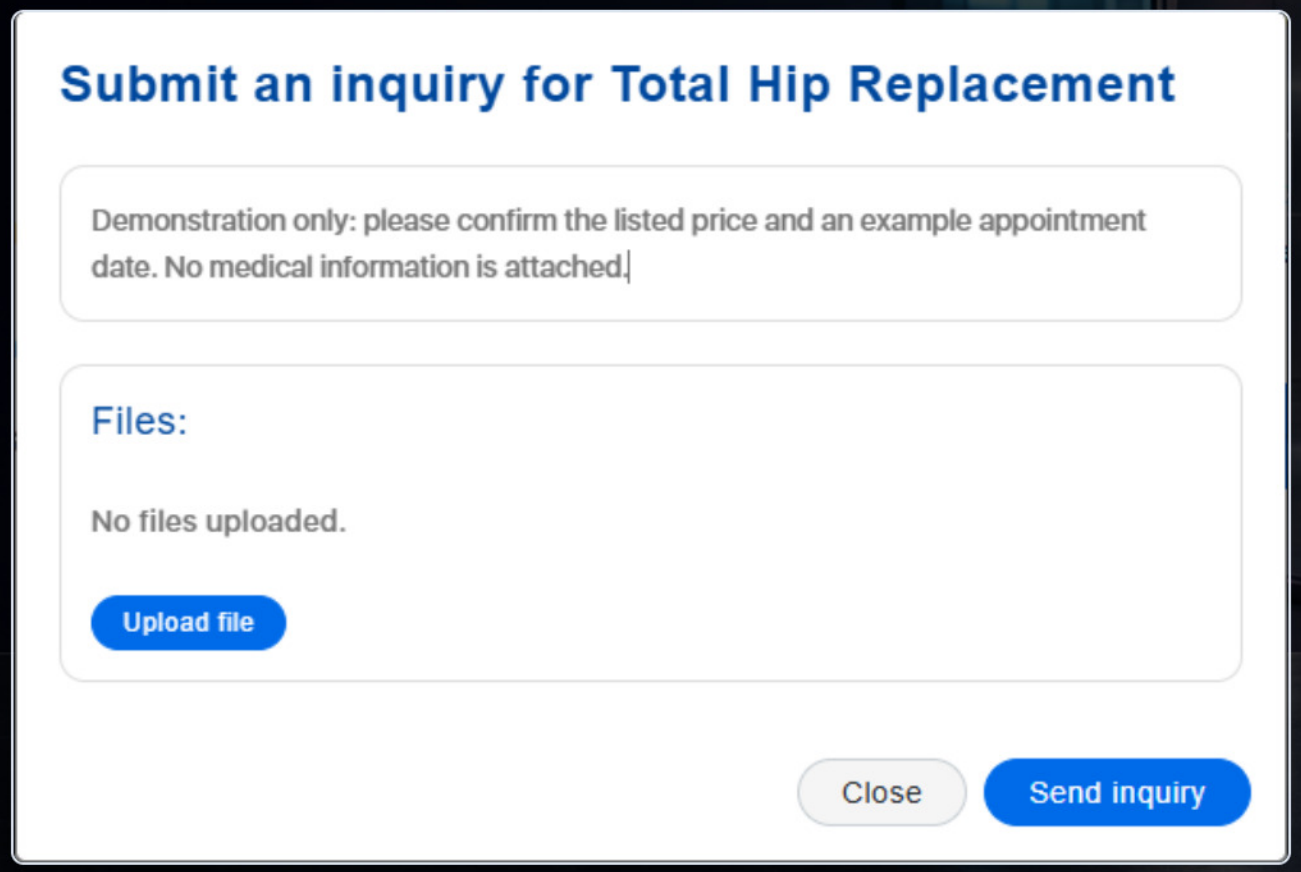
Mobile discovery

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PATIENT INQUIRY

TURN DISCOVERY INTO A CONVERSATION

The inquiry carries the selected hospital and procedure into a persistent coordination record.



PROCEDURE CONTEXT

Keep the chosen treatment attached to the patient's inquiry.

PATIENT MESSAGE

Capture questions and relevant details with optional file attachments.

HOSPITAL FOLLOW-UP

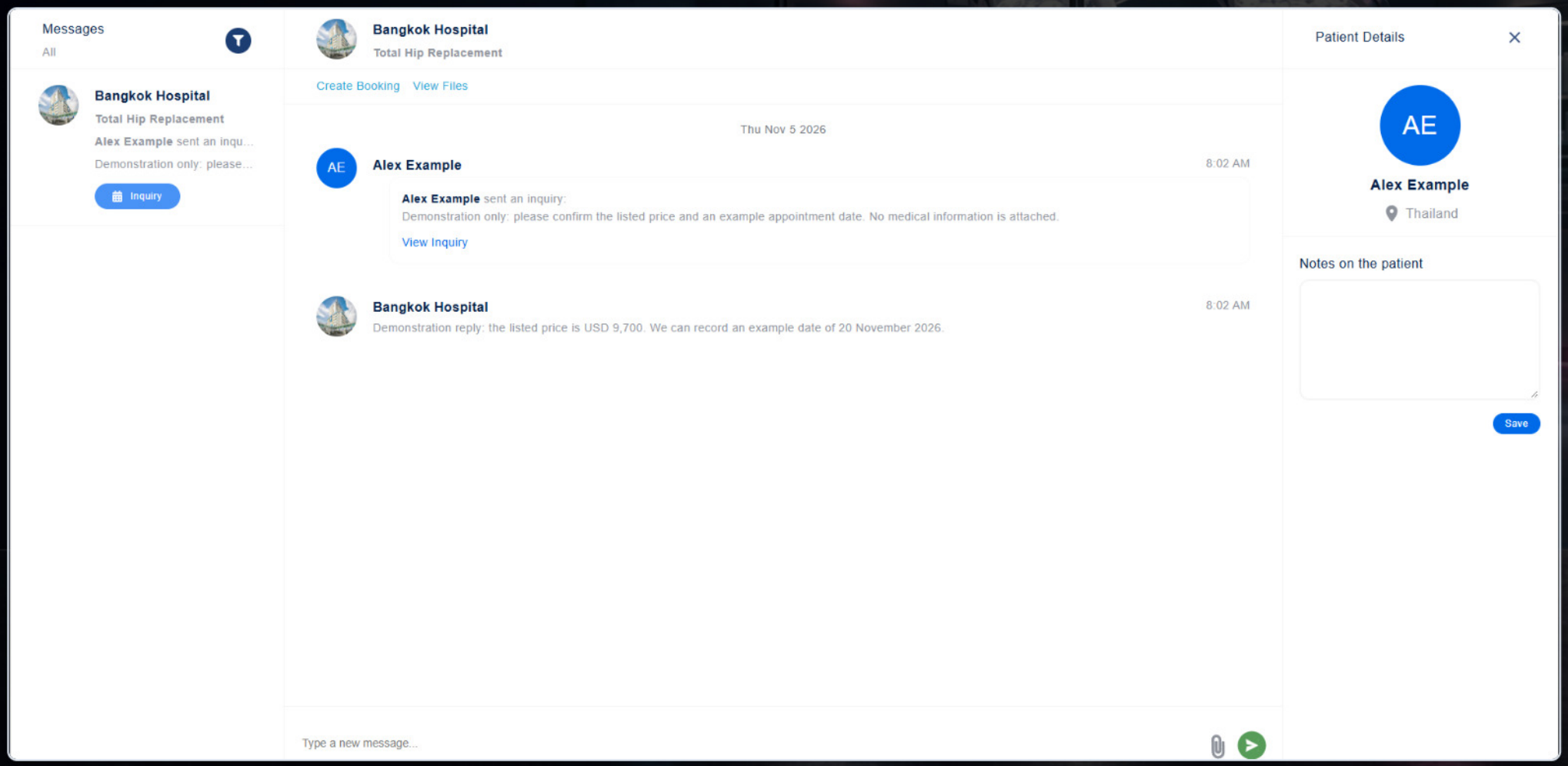
Continue the conversation in the shared workflow.

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HOSPITAL COORDINATION

KEEP BOTH SIDES IN THE SAME CONVERSATION

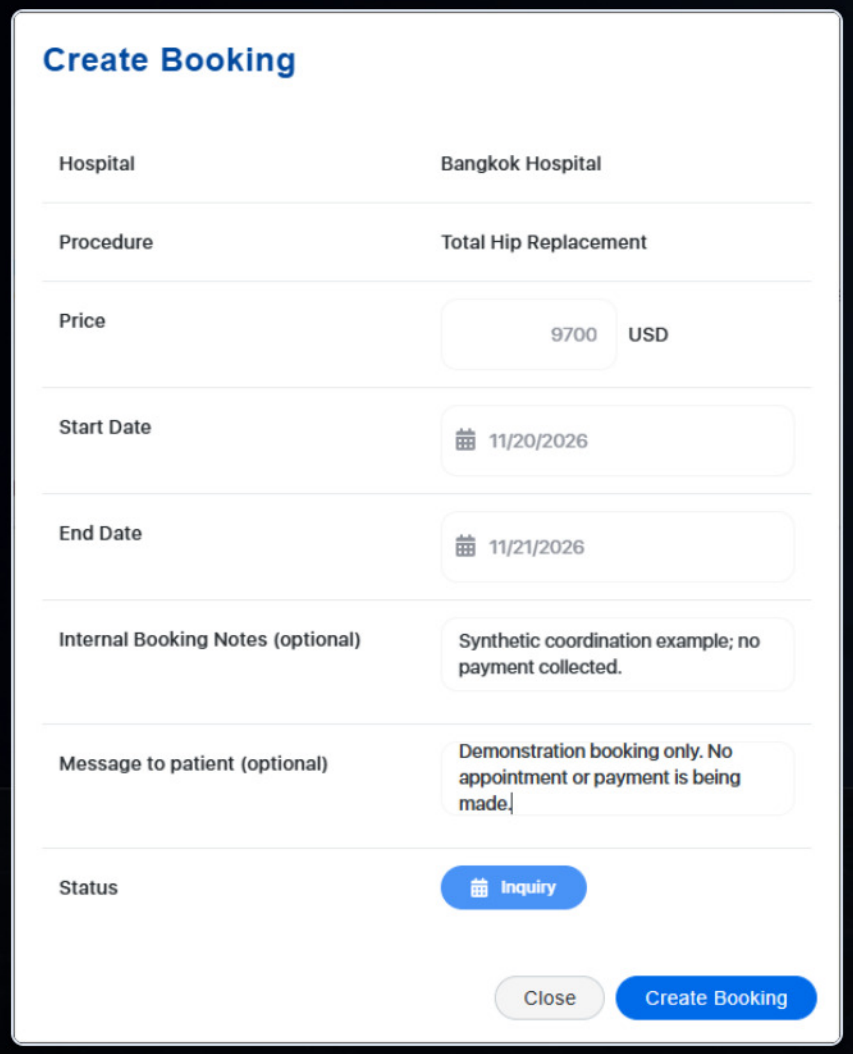
Patient details, notes, attachments and the inquiry history remain connected to the hospital reply.



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BOOKING COORDINATION

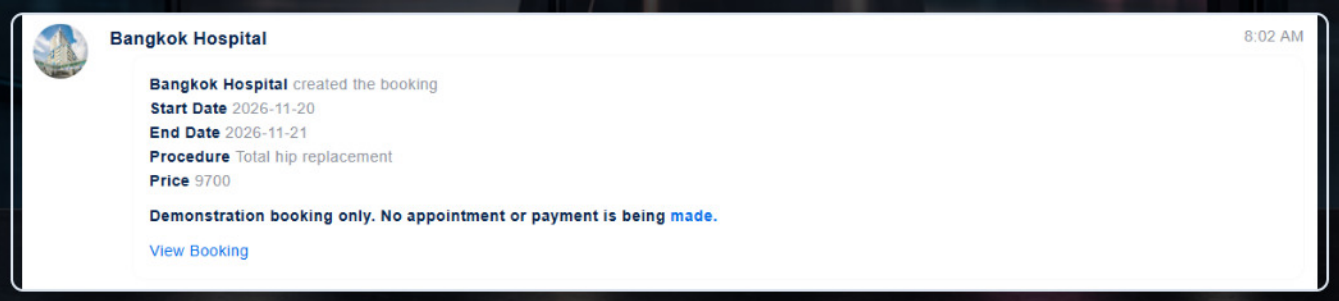
FROM REPLY
TO A SHARED BOOKING RECORD



RECORD THE ARRANGEMENT

Dates, price, notes and status stay with the inquiry.

VISIBLE IN THE PATIENT THREAD



Persisted updates keep the patient and hospital in sync.

STRUCTURED DATA BENEATH EVERY RESULT

Nested editors connect provider identity, departmental context and procedure-level inputs.

HOSPITAL

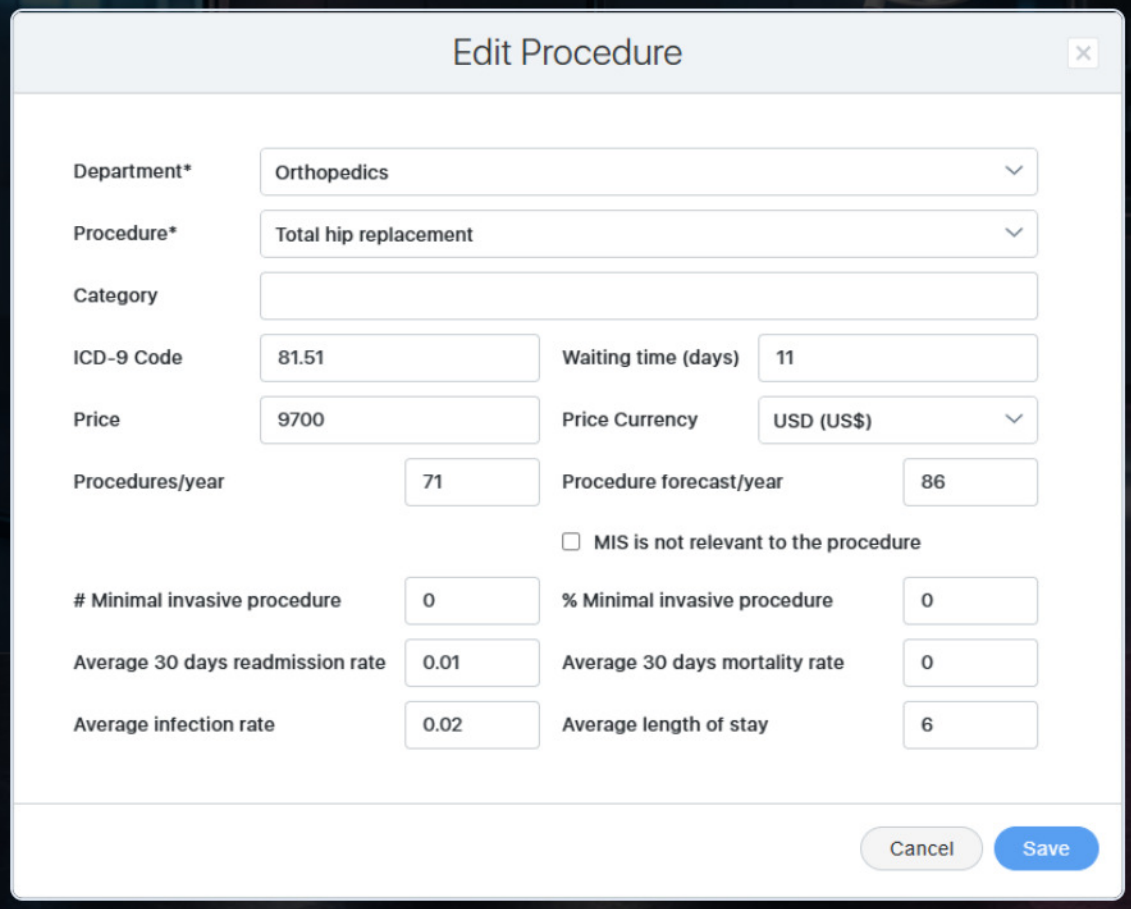
Location, services, accreditations and provider profile.

DEPARTMENT

Specialty, staff, facilities and annual activity.

PROCEDURE

Price, waiting time, volume and outcome-related inputs.



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DATA OPERATIONS

PROVIDER WORKBOOKS BECOME PRODUCT DATA

Import structured spreadsheets and export filtered hospital, department, procedure and equipment data.

Hospitals | **Departments** | **Procedures** | **Equipment**

IMPORTED PROVIDERS IN THE ADMIN WORKSPACE

Name | Search... | Type • All | Country • 1 | Department • All | Procedure • All | All Fields

Index	Score	Site Rank	Rank	Created	Name	Country	Deps.	Procs.	Beds	ICU Beds	Total Staff	Physicians	Nurses
1	39.03	0.0 ★★★★★	38	11/5/26	Pitié-Salpêtrière Hospital 0	France	9	184	1,706	175	8,657	1,308	5,987
2	39.01	0.0 ★★★★★	39	11/5/26	Hôpital Européen George... 0	France	10	177	827	25	3,200	725	1,771
3	36.55	0.0 ★★★★★	73	11/5/26	Le Kremlin-Bicêtre - Hôpi... 0	France	6	141	889	109	4,500	105	285

Keep updates manageable

Move between workbook operations and the same structured provider model.

Import | Export

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SCORING ENGINE

A PROPRIETARY METHOD.
AN ENGINEERED PRODUCT.

I implemented the scoring algorithm behind the discovery engine

Hospital
Institution and procedure context

Clinic
Clinic-specific scoring profile

IVF
IVF-specific scoring profile

Stored scores + administrative explanations

Provider data becomes a reusable result for administration and discovery.

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CALCULATION ENGINEERING

CALCULATE IN THE BACKGROUND.
REUSE THROUGHOUT DISCOVERY.

Target each provider's actual procedures, store results, and report progress through WebSockets.

Provider inputs
Hospital + procedure data

→

Score worker
Calculation + progress

→

Stored results
Scores + explanations

Name | Search... | Type • All | Country • 1 | Department • All | Procedure • 1 | All Fields

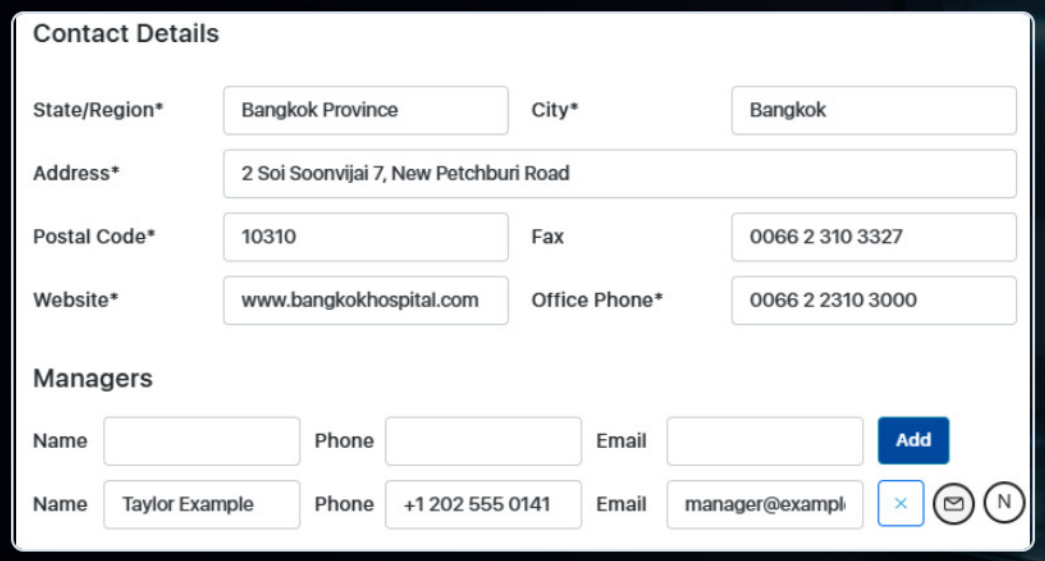
Index	Score	Site Rank	Rank	Created	Name	Country	Deps.	Procs.	Beds	ICU Beds	Total Staff	Physicians	Nurses
1	67.99	4.7	17	11/5/26	Bangkok Hospital 2	Thailand	11	187	343	22	1,441	741	700
2	65.17	4.6	36	11/5/26	BNH Hospital 1	Thailand	11	150	227	16	1,200	440	550
3	62.63	4.5	56	11/5/26	Bumrungrad International... 1	Thailand	13	182	548	48	1,200	900	300
4	59.03	4.3	84	11/5/26	Chularat 3 International H... 0	Thailand	9	180	150	11	1,000	140	310
5	52.85	4.0	167	11/5/26	Samitivej Srinakarin Hosp... 0	Thailand	11	183	400	50	900	300	280
6	49.4	3.5	202	11/5/26	Chularat 9 Airport Hospital 0	Thailand	11	190	150	11	545	75	120
7	47.93	3.5	212	11/5/26	Yanhee Hospital 1	Thailand	7	174	400	18	1,250	216	800
8	44.26	3.0	235	11/5/26	Chularat 11 0	Thailand	10	180	100	7	456	75	142
9	42.11	3.0	254	11/5/26	Chularat Cholvaej 0	Thailand	3	88	28	2	140	26	86

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HOSPITAL ONBOARDING

ONBOARD THE HOSPITAL. CONNECT THE TEAM.

Administrators provision hospital-linked manager accounts and manage user access.



ADMINISTRATOR-LED SETUP

Link managers to the provider.

Create or remind accounts.

Support multiple hospital managers.



USER ADMINISTRATION

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SYSTEM ARCHITECTURE

ONE APPLICATION.
CONNECTED RESPONSIBILITIES.

Angular / TypeScript with patient, hospital and CoreUI administrative surfaces.

Patient
Discovery + coordination

Hospital
Inquiries + bookings

Admin / CoreUI
Data + scoring controls

Node.js / Sails API
Shared services + Waterline data access

MongoDB
Providers, scores, users, bookings and messages

Worker threads
Scoring + ranking collection
WebSocket progress

Supporting services
Puppeteer · SendGrid
AWS / S3 deployment tooling

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ENGINEERING OWNERSHIP

FROM SPECIALIST LOGIC TO A COMPLETE PLATFORM

End-to-End: Full-stack development / Scoring engine implementation / Patient and hospital workflows

Scoring & data engineering	Proprietary method implementation, stored explanations, background recalculation and spreadsheet operations.
Patient experience	Procedure discovery, practical filters, comparisons, provider profiles and favorites across desktop and mobile.
Hospital coordination	Manager onboarding, inquiries, replies and booking records connected through one application.

Senior Full-Stack Engineer & SaaS Architect | End-to-End 2023