



INDIAN HEALTH SERVICE HUMAN-CENTERED DESIGN

JOURNEY 4: ATV ACCIDENT [SECTION 6 OF 11]

SERVICE BLUEPRINTS

How to read the Service Blueprints

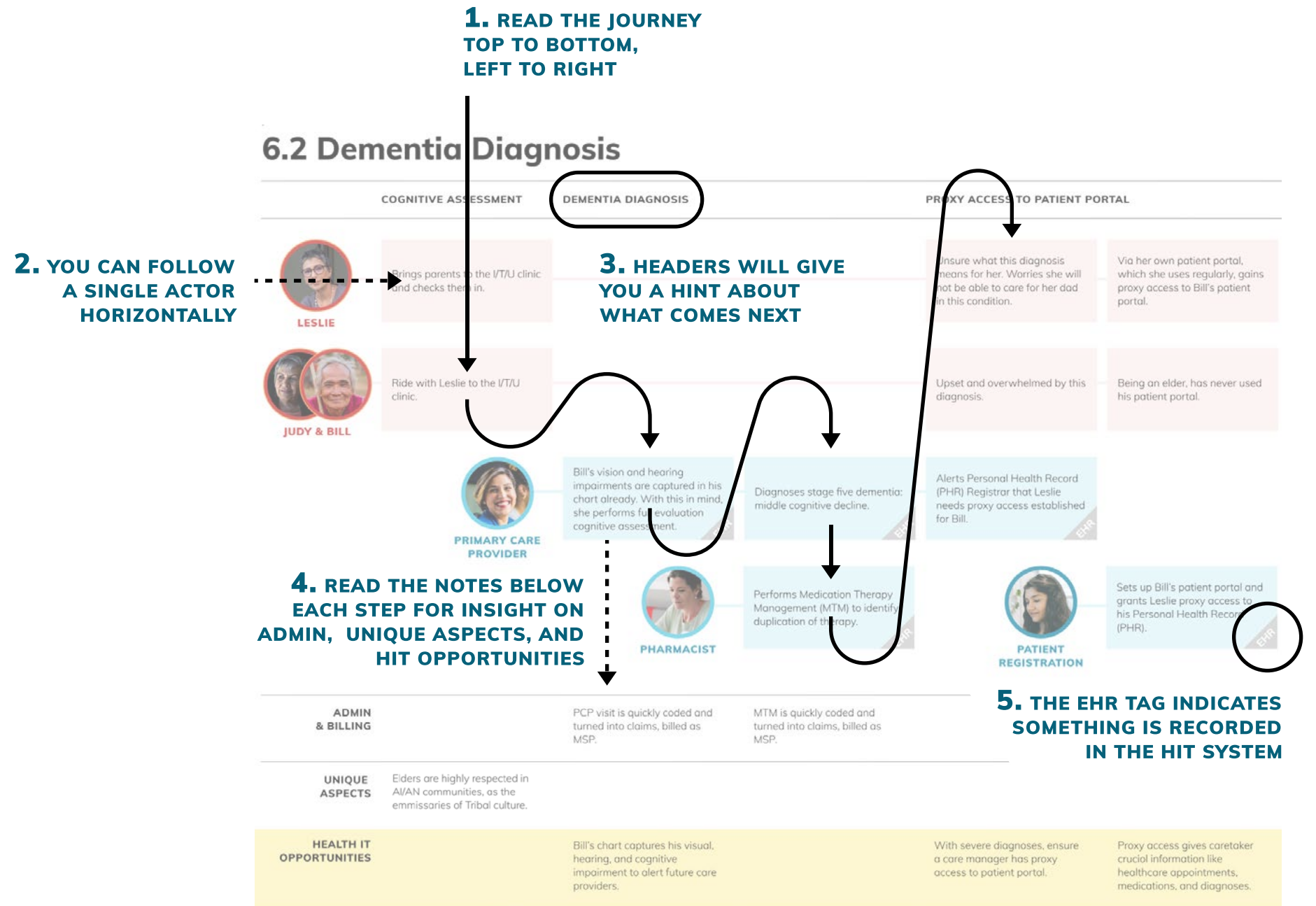
The journeys in this report present seven stories of patients and caretakers receiving care in adverse circumstances. The purpose is to convey stories that, read collectively, paint a dynamic and encompassing picture of the varying needs of the AI/AN population and IHS staff when it comes to health services.

These are composite experiences of real people and the processes they engage in to seek and provide care. Examples of regulations and reporting requirements are pulled from interviews and Subject Matter Experts.

However, these represent a “happy path” from an IT perspective. While retaining real challenges in the landscape such as ruralness and lack of connectivity, IT solutions are added to the stories to illustrate how IHS might service existing needs with modern solutions. These solutions are not meant to be prescriptive. They are simply examples of how Health IT can improve care. Solution-agnostic use cases are listed at the end of this report.

How the Stories Were Crafted

The HCD team selected stories based on patient’s health disparities for AI/AN patients. The sequence of events was crafted to highlight Health IT opportunities and unique aspects of I/T/U that can be affected positively by Health IT opportunities as comprehensively as possible. Many health disparities and health outcomes were left out due to scope and to whether it covered a variety of Health IT opportunities. Workshops with team members from the Health IT Modernization project, HHS and the IHS were conducted to ensure the right opportunities were being highlighted based on experience and discovery conducted by many of those team members.



JOURNEY 4: ATV ACCIDENT

AARON, ESTHER, AND NOAH

Aaron and his ex-wife Eva have two kids, Esther and Noah. When Aaron is driving Esther and Noah back to Eva's home in his ATV, they crash. The EMS is dispatched.

EMERGENCY CARE

TELEHEALTH

PRIVATE FACILITY

IHS FACILITY

IMAGING

PURCHASED REFERRED CARE

ACCIDENT

TRAUMATOLOGY

INTER HOSPITAL TRANSITION

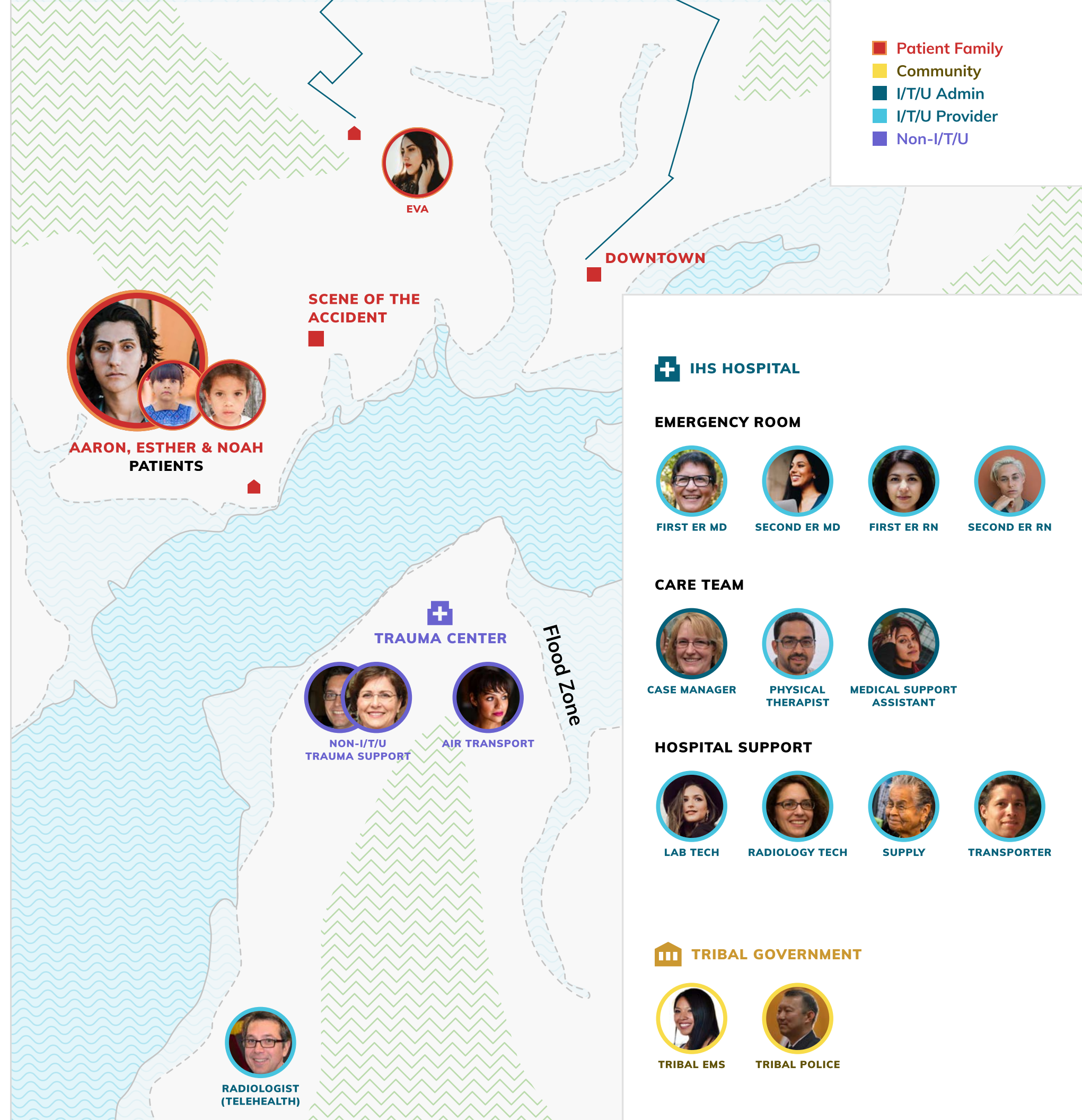
Aaron's Background

Aaron has recently divorced his wife, Eva. Aaron lives one hour away from the reservation. Eva lives on the reservation with their two children, Esther and Noah. They share custody of the children.

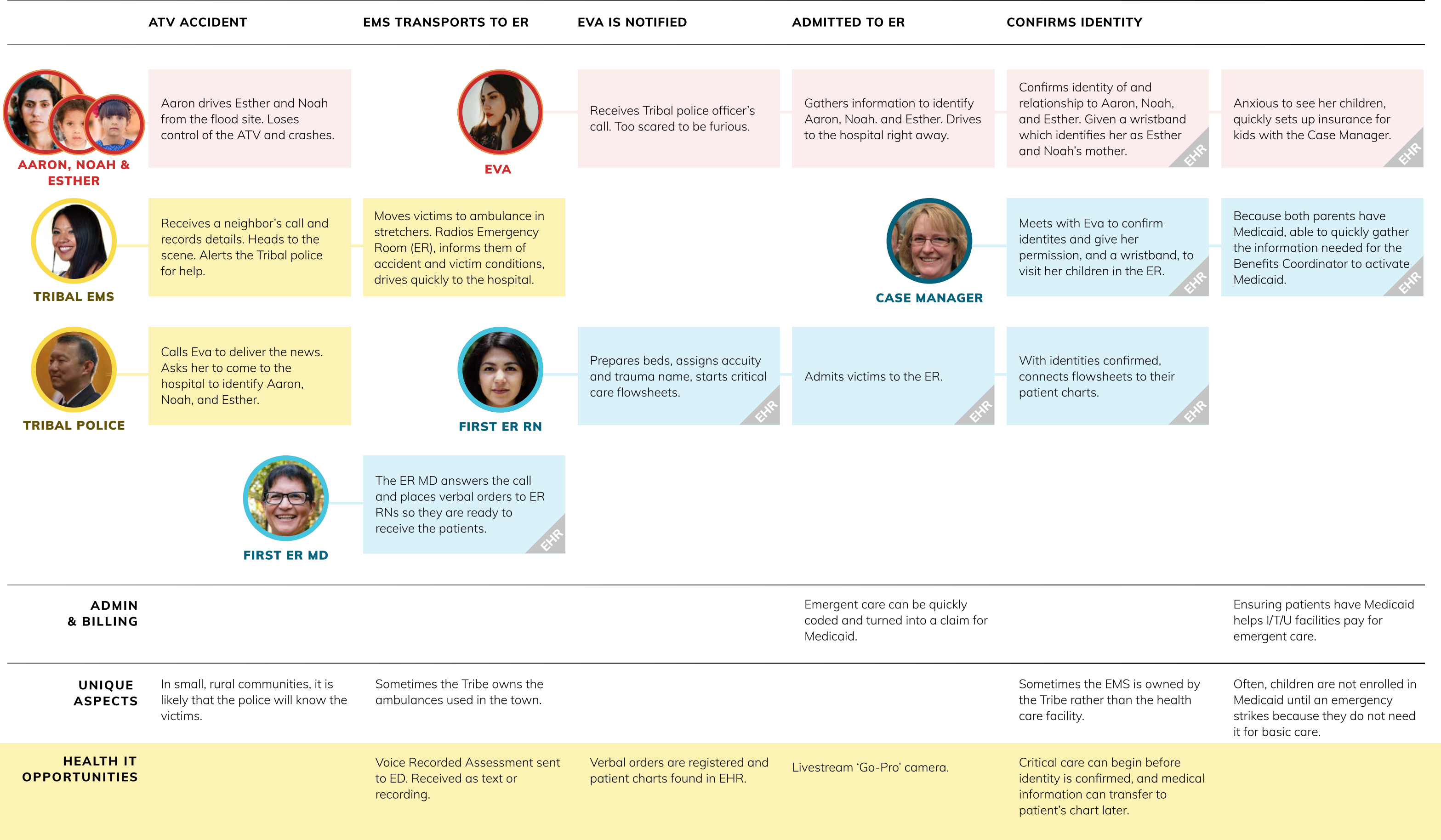
There has been a recent flood in the area where Aaron lives, and he and the kids decide to take the 4-wheeler to check on the damage to the reservation.

As they drive back to Eva's home, Aaron crashes his ATV into a ravine washout created by the flood.

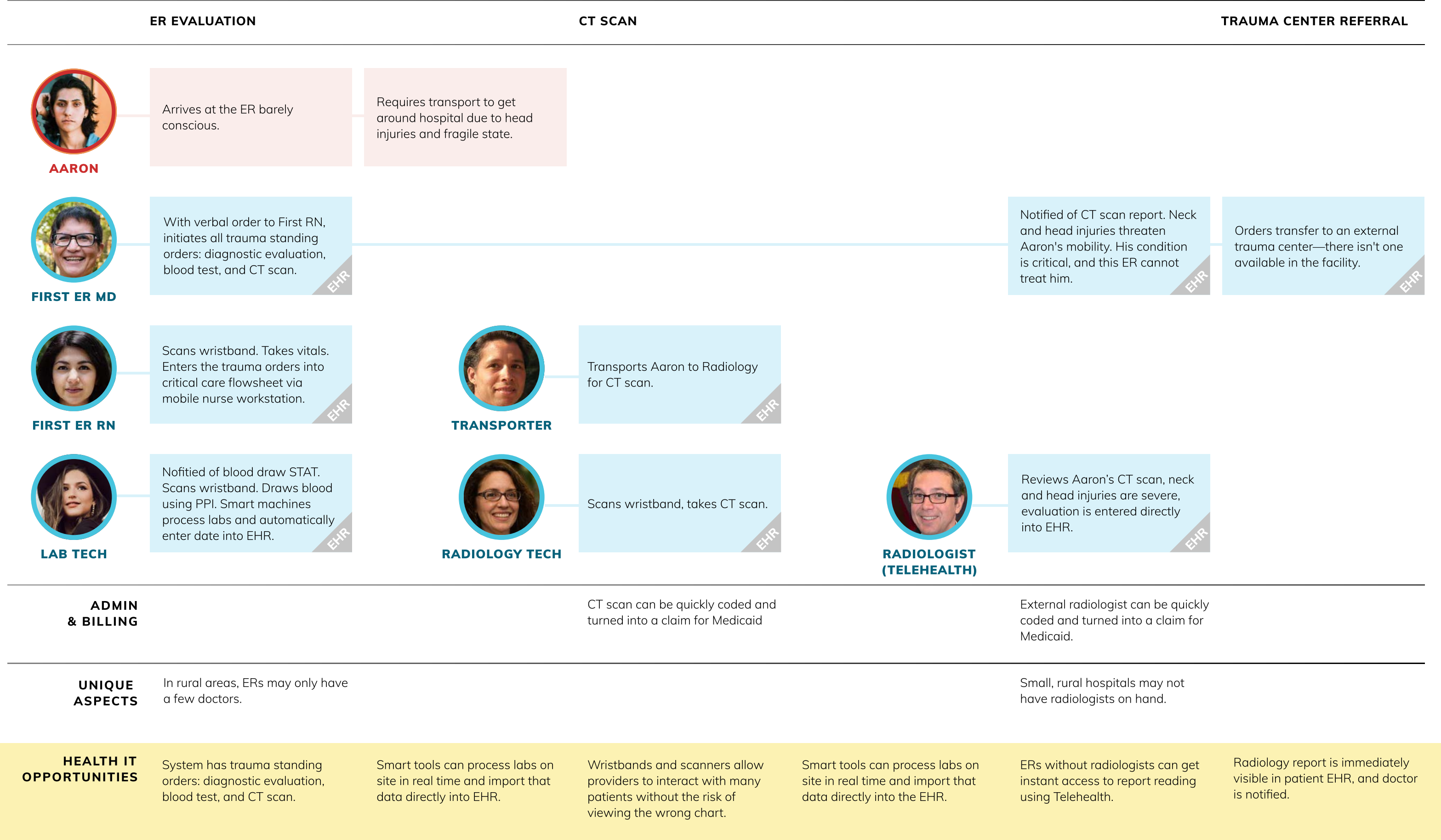
A neighbor sees the accident happen and calls the Tribal EMS for help. The ambulance arrives and transports them to the IHS hospital Emergency Room which is one hour away from the site of the accident.



4.1 Aaron Has an ATV Accident, EMS Comes to the Rescue



4.2 Aaron's Critical Injuries are Addressed



4.3 At the Same time, Esther and Noah are Treated

ESTHER IS TREATED

FRACTURED SHOULDER



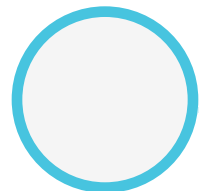
ESTHER

Shoulder hurts a lot.



SECOND ER MD

Assesses Esther and asks nurse to enter orders for a CT scan.



SECOND ER RN

Scans Esther's wristband. Takes vitals. Enters standby order for radiology via mobile nurse workstation. Takes Esther to radiology.



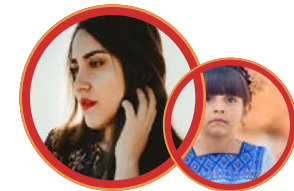
RADIOLOGY TECH

Takes a CT scan of Esther's shoulder.



RADIOLOGIST (TELEHEALTH)

Reviews Esther's CT scan, sees a shoulder fracture and writes an evaluation.



EVA & ESTHER

Learn how to put arm in sling, and keep it in place.

Places an order for a nurse to give her a sling.

Puts on arm sling to immobilize Esther's shoulder, educates Eva and Esther about how to keep her arm in place.



SUPPLY

Sling is delivered, appropriately scanned and billed.

ADMIN & BILLING

Sling can be quickly coded and turned into a claim for Medicaid.

UNIQUE ASPECTS

HEALTH IT OPPORTUNITIES

BCMA is used for documenting and tracking dosages in EHR during ER observation.

Effective, real time notifications let staff know of important next steps in emergent care.

Supply staff can easily scan materials out of storage for tracking inventory and billing.

4.3 At the Same time, Esther and Noah are Treated (cont'd)

NOAH IS TREATED

RECOVERY CARE PLAN

PARENTAL ACCESS



NOAH

Forearm hurts!



EVA, NOAH & ESTHER

Learn how to keep Noah's arm in place in the cast.

Eva has access to her children's visit information, care plan, discharge instructions, and prescriptions via her patient portal.

Esther will wear a sling for two weeks, and begin Physical Therapy (PT) next week. Noah's cast will come off in six weeks.



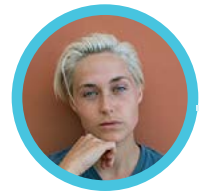
SECOND ER MD

Assesses Noah and asks nurse to enter an order for an X-ray.

Reviews Noah's X-ray report. Decides to immobilize his arm. Places an order for cast.

Puts on a cast for Noah, educates Eva and Noah about how to keep his arm in place.

Refers Esther to PT and sends e-prescription for light pain killers. Enters discharge instructions in patient charts.



SECOND ER RN

Scans Noah's wristband. Takes vitals. Enters standby order for X-ray via mobile nurse workstation.



SUPPLY

Coating supplies for the cast arrive and are appropriately scanned and billed.



CASE MANAGER

Documents care plans for Esther and Noah. Receives PT referral, arranges Esther's first PT appointment.



RADIOLOGY TECH

Receives order for X-Ray. Comes to the ER with a portable X-ray to take an X-ray of Noah's arm at his bedside.



RADIOLOGIST (TELEHEALTH)

Reviews Noah's X-ray, sees a fractured radius and writes an evaluation.

ADMIN & BILLING

X-ray can be quickly coded and turned into a claim for Medicaid.

Cast can be quickly coded and turned into a claim for Medicaid.

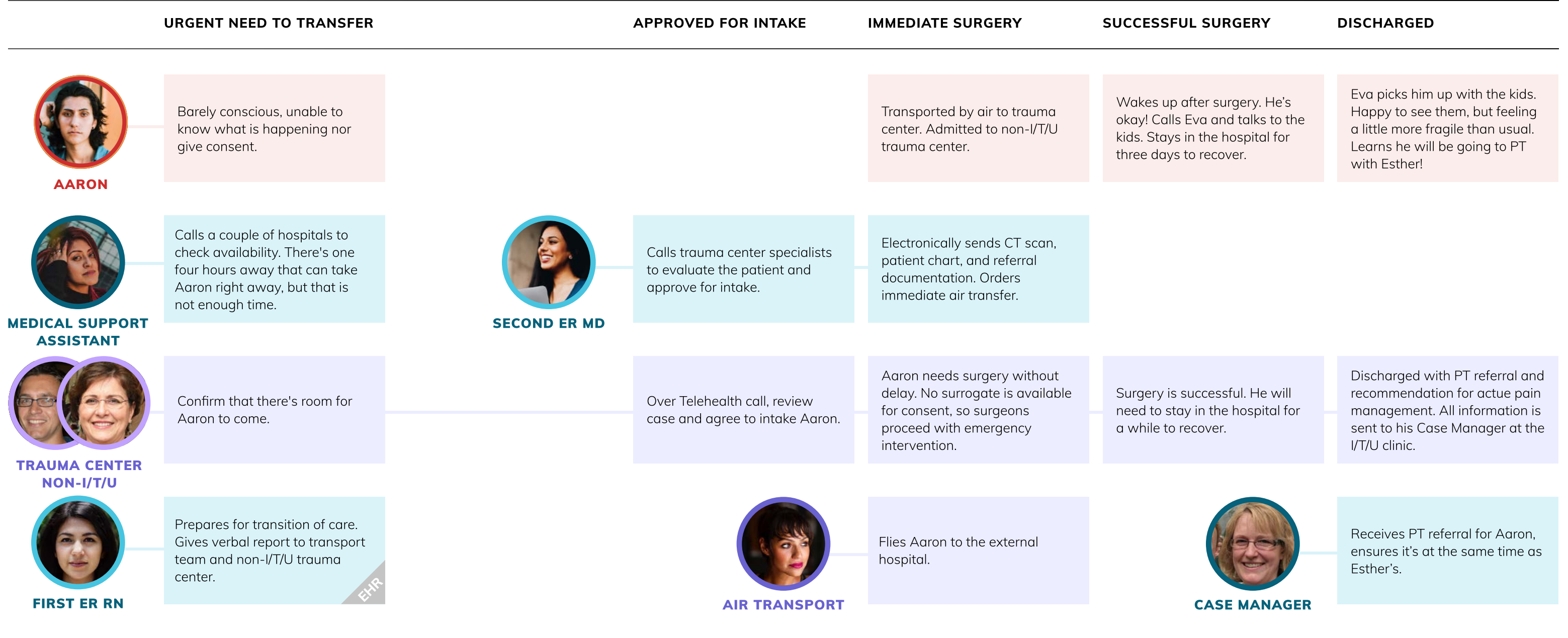
UNIQUE ASPECTS

HEALTH IT OPPORTUNITIES

Care plan, prescriptions, and discharge information is available in patient portal.

Care plans are automatically shared with primary care facility.

4.4 Transfer to a Non-I/T/U Trauma Center



ADMIN & BILLING

Air transport can be quickly coded and turned into a claim for Medicaid.

Surgery claim will be billed by external facility.

UNIQUE ASPECTS

In very rural areas, air transport is often the only effective option.

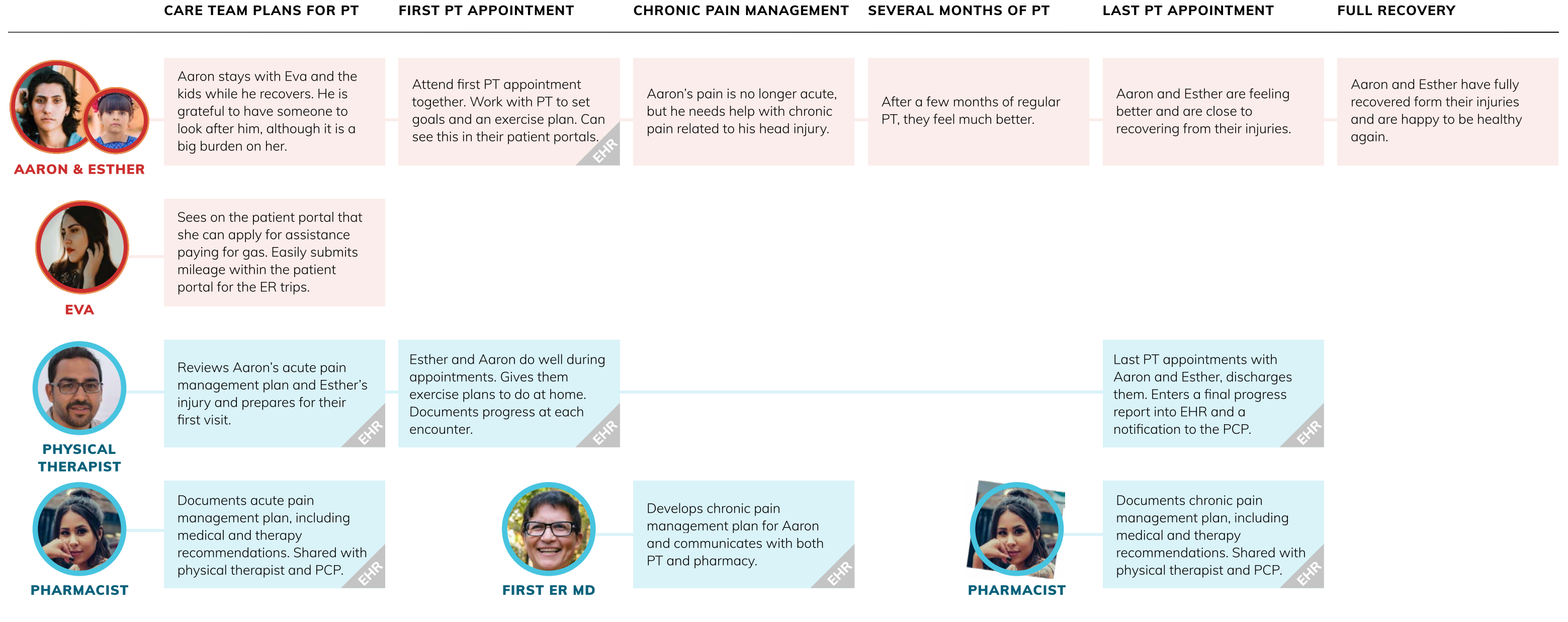
HEALTH IT OPPORTUNITIES

Integration with nearby trauma centers to know the closest one that can treat a given patient.

Telehealth used to ensure Aaron gets continuity of care.

Discharge order is easily disseminated to the correct parties: PCP, Case Manager, physical therapist, pharmacist.

4.5 Recovery



ADMIN & BILLING

Physical therapy can be quickly coded and turned into a claim for Medicaid.

UNIQUE ASPECTS

PT is new to many I/T/U clinics, and so many patients have been dealing with chronic pain for decades.

HEALTH IT OPPORTUNITIES

Patient portal shows opportunities for caregivers to apply for savings.

Patient portal displays PT assignments and progress as well as acute pain management plan.

Patient portal displays chronic pain management plan.

HHS / IHS Health IT Modernization

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