

Project Balloon Final Meeting

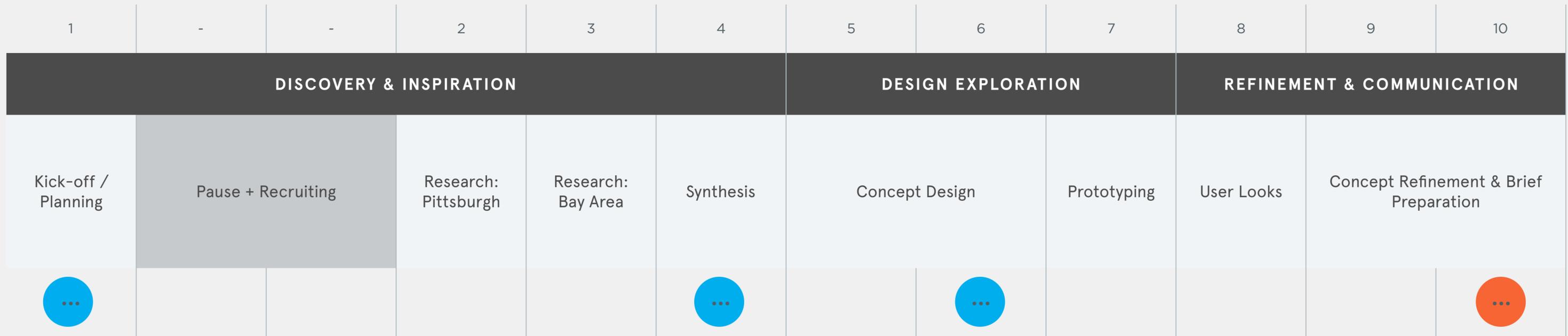
March 21, 2017

IDEO + Three Lakes Partners



Understand the lives and challenges of those with IPF, their caregivers, and families to discover key opportunities that can create meaningful improvement.

PROJECT PLAN



IDEO'S PROCESS



Immersed in IPF

We spent time with patients, families, experts with different perspectives, socioeconomic statuses, geographies, and stages of the disease



Identified Opportunities

Based on what we learned in the field, we identified opportunities that would improve patients and families quality of life, as well as the greater system of care for IPF



Patient Feedback

We brought our conceptual provocations to the PF Warriors in Dallas to get their feedback on whether we were in the right direction and to understand criteria for success for whomever would move these ideas forward



Captured Stories

We synthesized the most important needs to share with potential partners so they have greater empathy and understanding of how IPF impacts quality of life

1

Conceptual Provocations

Present the vision for a future patient experience with new conceptual products and services.

2

Communication Materials + Assets

Share a collection of assets that tell the human story of IPF and the viral charge of what we can do about it.

THE HUMAN SIDE OF IPF

VISION FOR THE FUTURE

TAKING ACTION

Let's breathe life into IPF.

In order to do something about it, we must first understand and empathize with the realities of this disease. Many patients and clinicians liken the sensation to breathing through a coffee stirrer.

Together, we can make this invisible disease visible.

The Human Side of IPF

IPF IS AN UNKNOWN DISEASE

What is Idiopathic Pulmonary Fibrosis?

IPF is an irreversible, unpredictable and incurable disease. And it's relatively unknown. It starts with scarring of the lungs that prohibits them from properly moving oxygen into the bloodstream.

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THE STATISTICS

People in the US living with IPF every year, approx.

100,000

People who die from IPF every year, approx.

40,000

Median length of survival after IPF diagnosis

3.8 Years



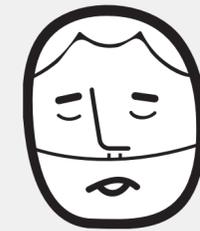
Approximate percentage who die unexpectedly in a hospital setting, which can be a painful, costly, and emotional end-of-life experience

The trend in all these numbers is

Rising

IPF IS AN UNKNOWN DISEASE

The patient's experience



Confusing the diagnosis

When they first hear “Idiopathic Pulmonary Fibrosis,” usually at diagnosis, patients and their families have no context or grounding to know how to react.

Comparing it to lung cancer

Since it's more familiar, they tend to compare IPF to cancer, unsure if this is better or worse.

Struggling to explain

Without public awareness, patients wrestle with understanding and explaining the realities of this disease to friends, family, employers, and the general public.

IPF IS AN INVISIBLE DISEASE

How does it feel to live with IPF?

The clinical description of Idiopathic Pulmonary Fibrosis does not begin to explain how the patients experience this disease.

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THE MOMENTS PATIENTS *FEEL* IPF

- General shortness of breath with daily activities
- Nagging cough making it difficult to carry on conversations
- Seeing themselves wearing a cannula for the first time
- Carrying heavy oxygen tank
- Having to re-train breathing after lung transplant

IPF IS AN INVISIBLE DISEASE

The patient's experience



Misjudging the reality

Until someone is on oxygen, their families and the public tend to misjudge the severity of IPF. Most patients complain that their loved ones assume they “feel fine” just because they “look fine”.

Grieving for breathing

Patients have described IPF in many ways, but all share the anxiety of running out of oxygen. A Respiratory Therapist described patients' physical experience with IPF as continuously “grieving for their breathing.”

Breathing through a coffee stirrer

For IPF patients, breathing is like inhaling through a coffee stirrer, with this constant need to try to catch their breath. For someone without IPF, it's comparable to running up a flight of stairs.

IPF IS AN UNPREDICTABLE DISEASE

How does it impact everyday life?

IPF does not just impact the lungs — it affects the patient and their family physically, cognitively, emotionally, and financially.

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HOW EVERYDAY LIFE CHANGES

- More time needed to get ready
- Prioritizing exercise and a healthy diet
- Minimizing or adjusting household chores
- Avoiding going outside in extreme weather
- Avoiding crowded public places to protect immune system
- Extensive planning and coordination for travel with oxygen

IPF IS AN UNPREDICTABLE DISEASE

The patient's experience



Adjusting to a new speed

As the disease progresses, patients first notice everything takes longer than before. Most initially attribute this to age, but many patients sooner or later realize they need workarounds to accomplish normal everyday tasks.

Keeping active

Many experts believe staying active can positively affect someone's mental state when living with this terminal illness, while also being key for a lung transplant. As the disease progresses, a patient's standard for "staying active" changes as their oxygen needs increase.

Taking it day by day

Because many patients have a hard time understanding the progress of their disease, patients and families deal emotionally with this unpredictability by appreciating each day as a small victory.

IPF IS A TERRIBLE DISEASE

What motivates and brings hope to those with IPF?

IPF can challenge someone's sense of self worth, but these patients are determined to live a life greater than their disease.

IPF IS A TERRIBLE DISEASE

The patient's experience



Walking with faith

IPF patients have been described as resilient and persevering. Even though they've been given this terrible diagnosis with a confusing and difficult-to-grasp prognosis, these patients are determined to live each and every day, moved by their faith and the people around them.

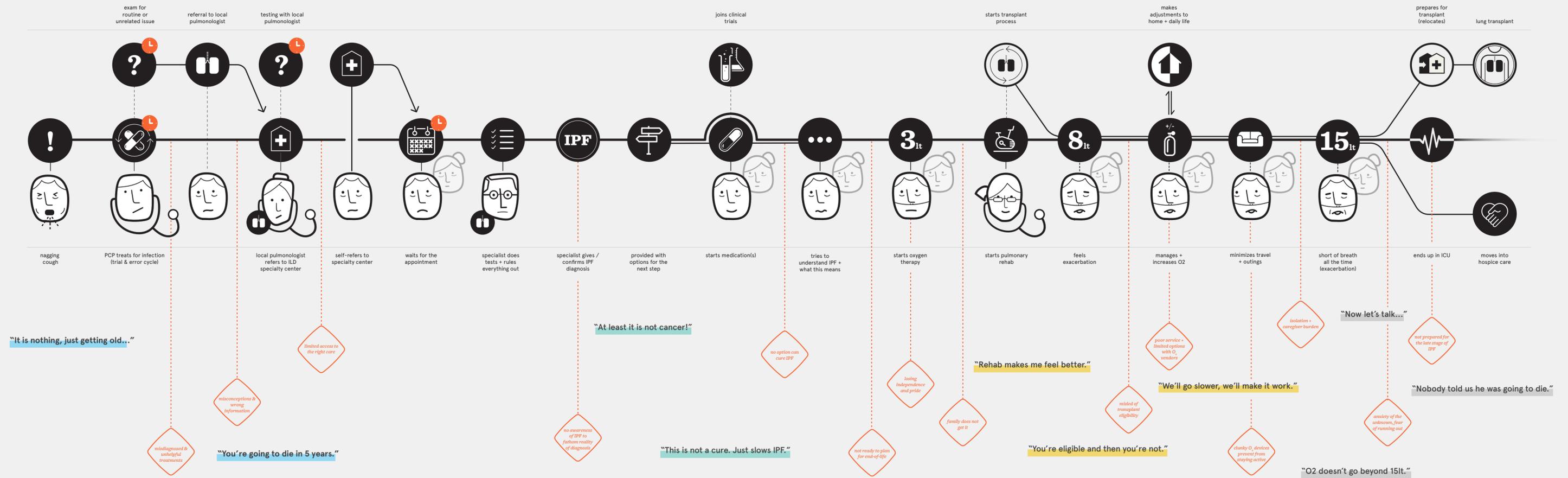
Maintaining the normal

Losing control over their lives and actions is frustrating. Patients and family try to maintain a sense of normalcy — finding solutions that allow them to continue enjoying their hobbies and everyday life.

Supporting fellow patients

Many patients and family caregivers are inspired by helping one another. They come to realize their experience was not for nothing, and might bring hope to the next person.

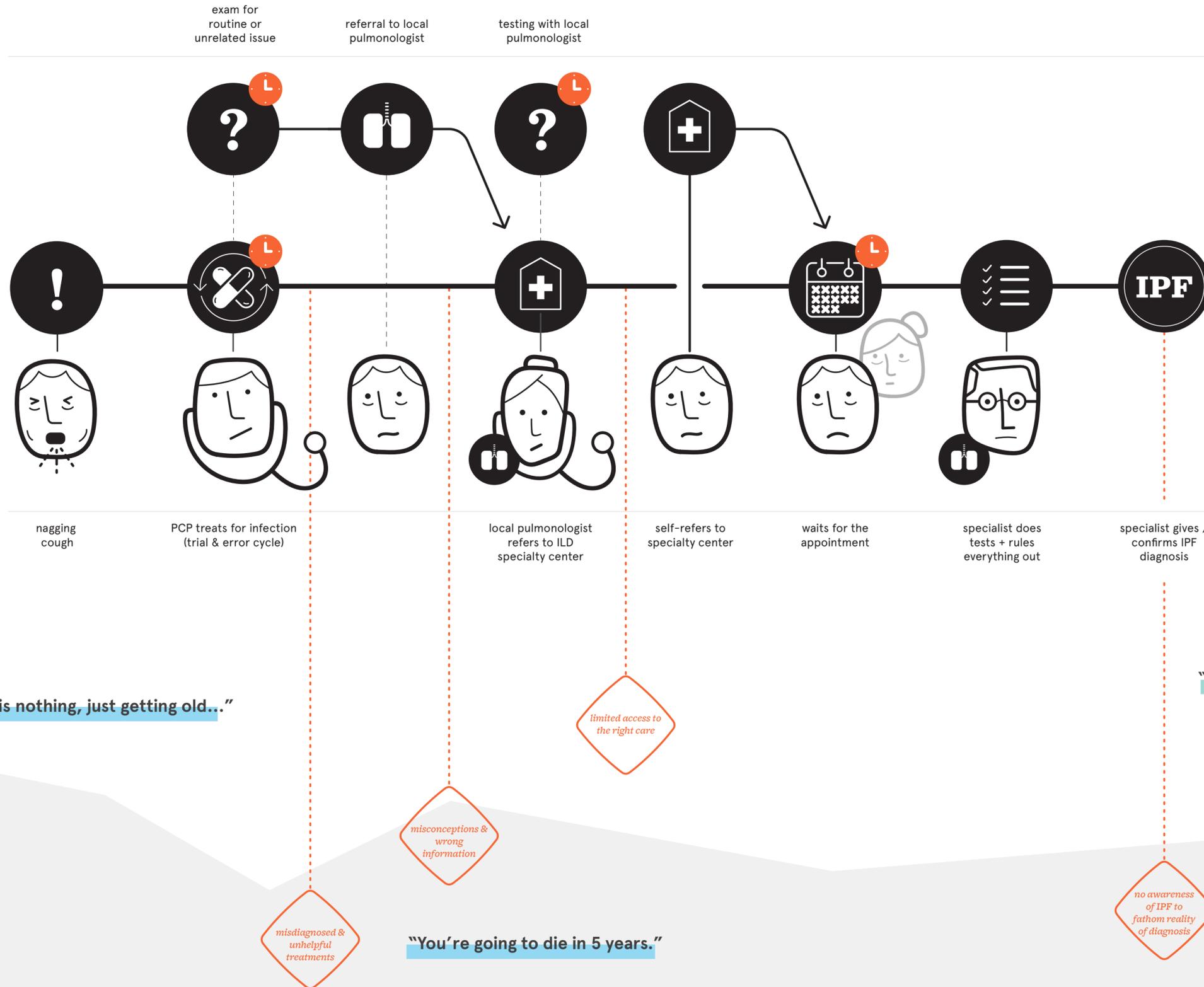
IPF PATIENT JOURNEY



THE HUMAN SIDE OF IPF

VISION FOR THE FUTURE

TAKING ACTION



SEARCHING FOR AN ANSWER

Prior to diagnosis, individuals can be stuck in this on-going loop of doctors and tests, often for several years, trying to find something definitive.



exam for

Searching for an Answer



nagging cough

"It is nothing, just gett

treatments

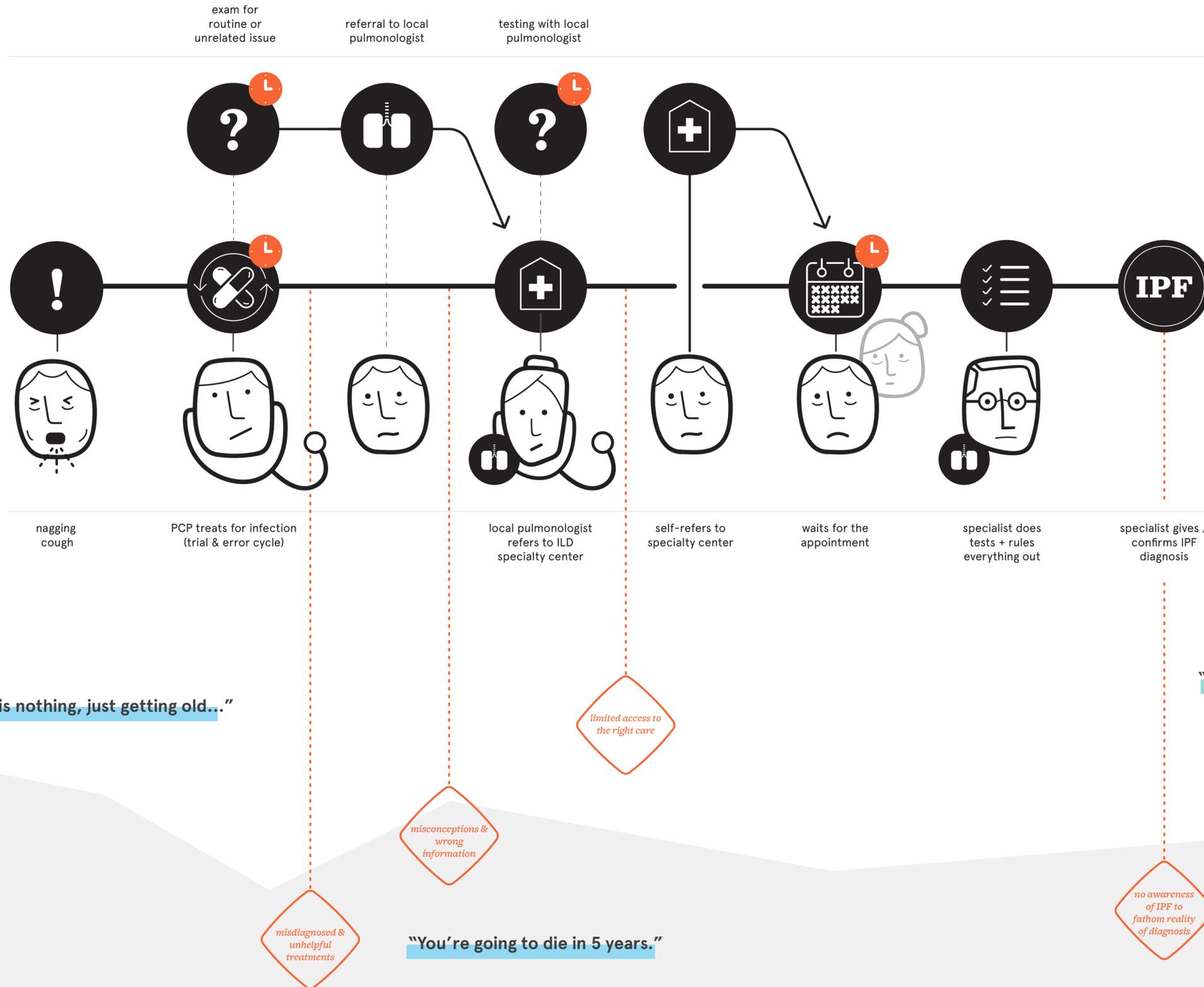
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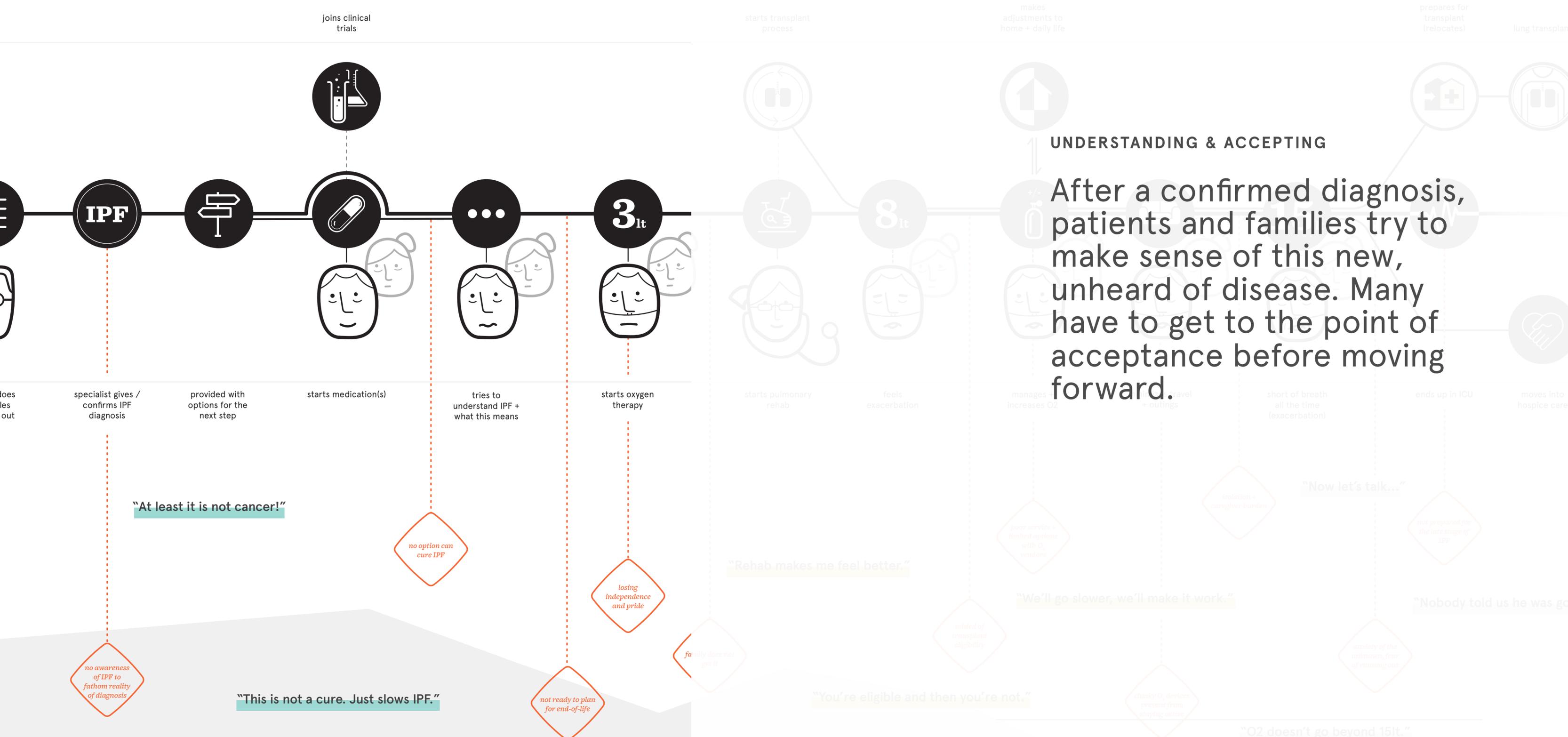
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Understanding and Accepting



IPF

specialist gives / confirms IPF diagnosis

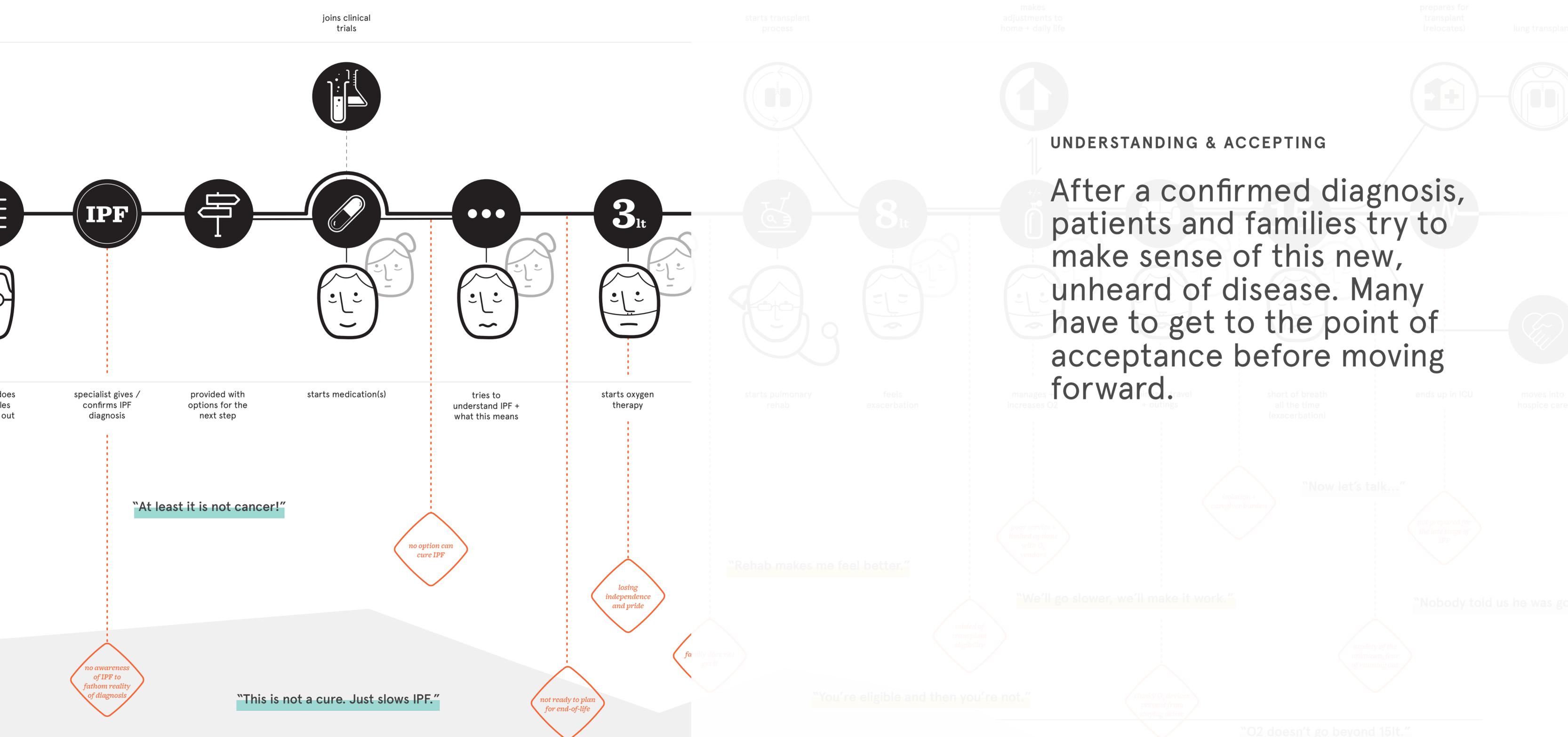
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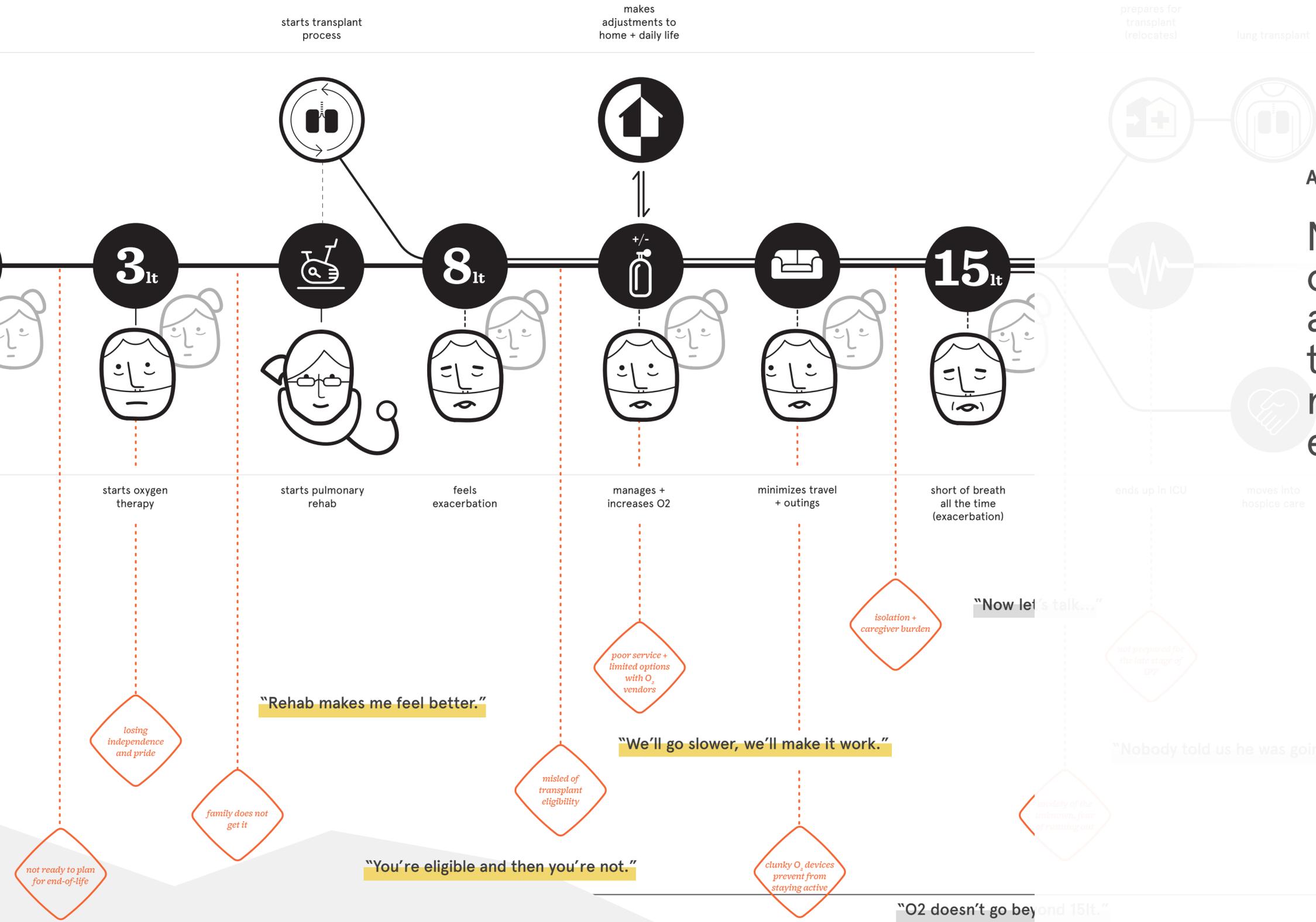
UNDERSTANDING & ACCEPTING

After a confirmed diagnosis, patients and families try to make sense of this new, unheard of disease. Many have to get to the point of acceptance before moving forward.

THE HUMAN SIDE OF IPF

VISION FOR THE FUTURE

TAKING ACTION



ADAPTING TO A NEW NORMAL

Now that they're dependent on oxygen therapy, patients are trying to figure out how to continue living with these new physical constraints and emotional struggles.

Adapting to a New Normal



3^{lt}

starts oxygen therapy

losing independence and pride

not ready to plan for end-of-life

staying active

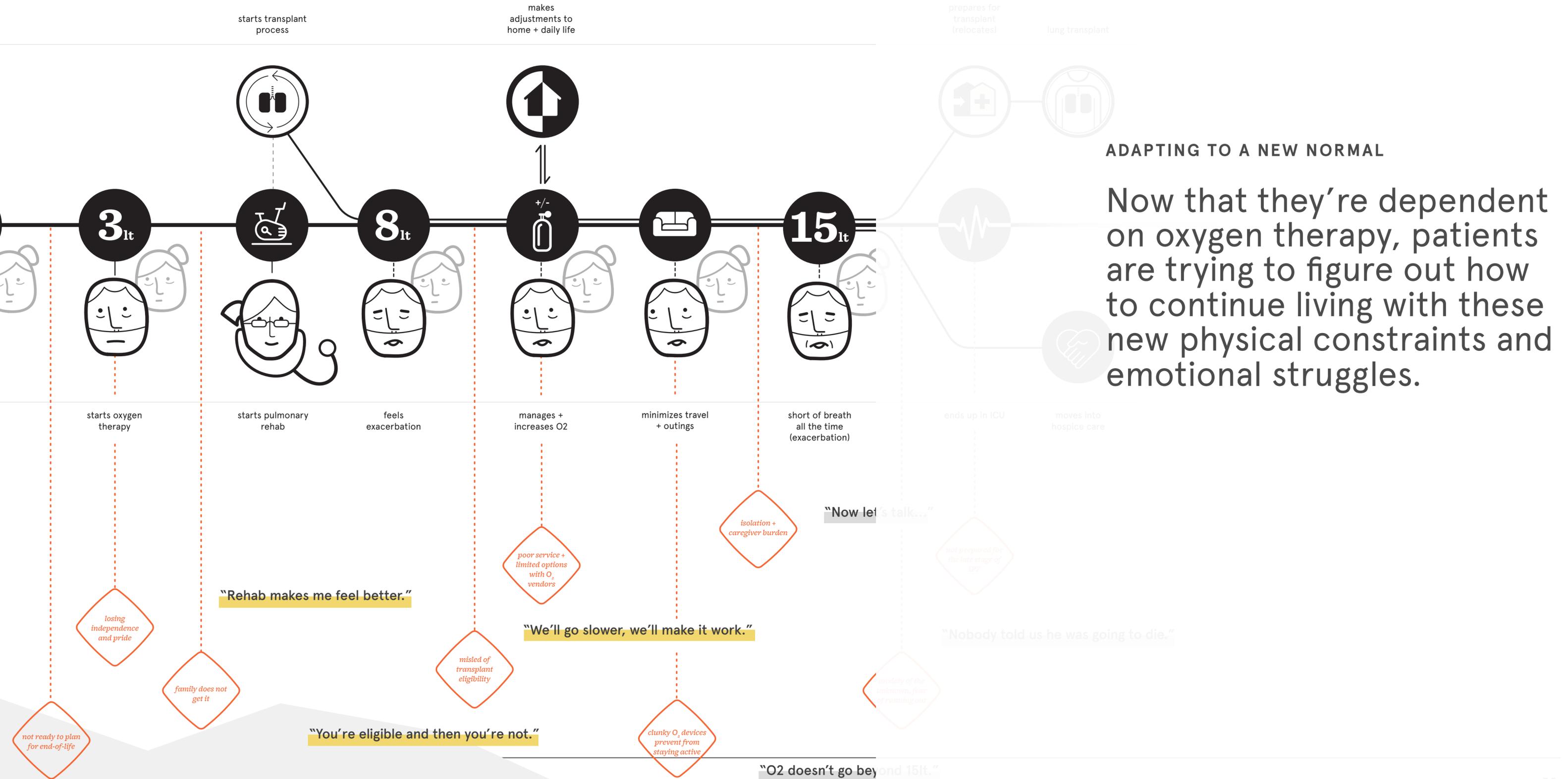
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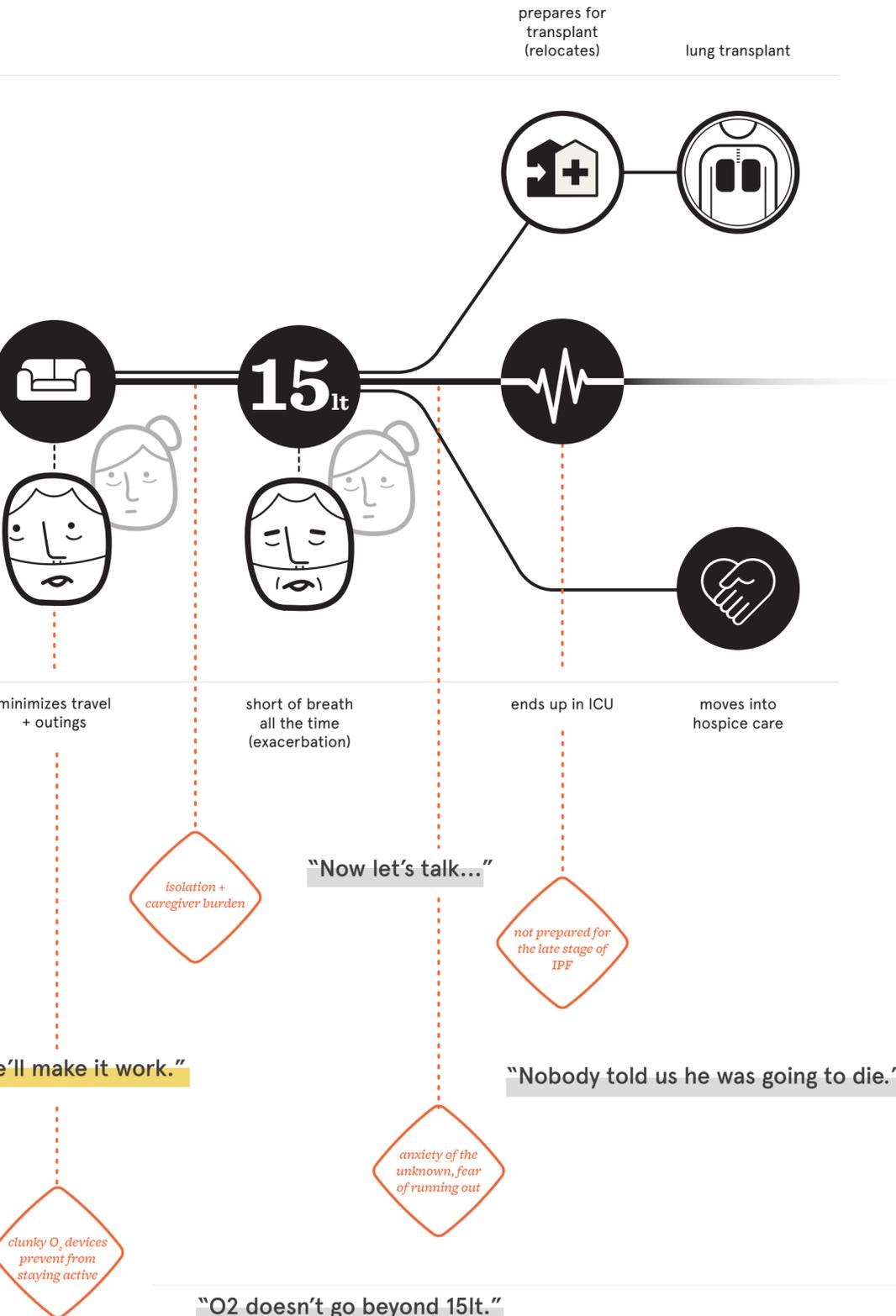
TAKING ACTION



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LEAVING A LEGACY

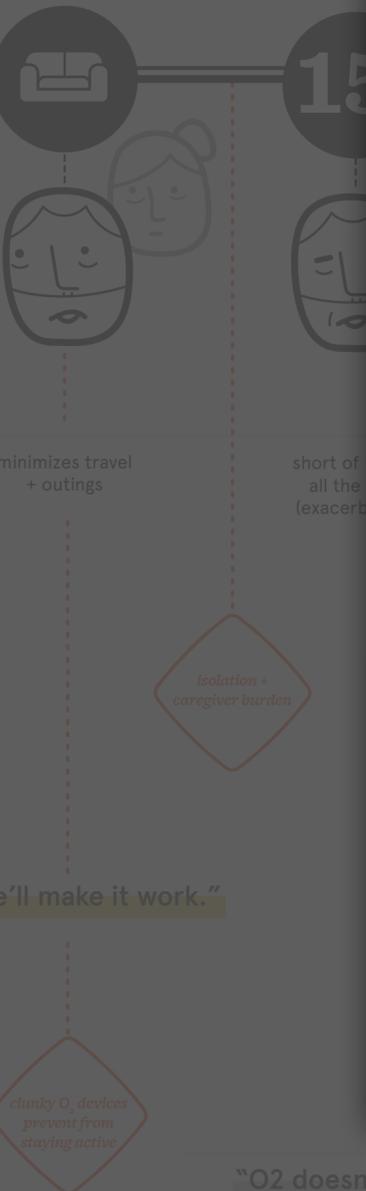
Patients think about how they want to be remembered by friends and family and face the realities of end-of-life planning.

prepares for

Leaving a Legacy



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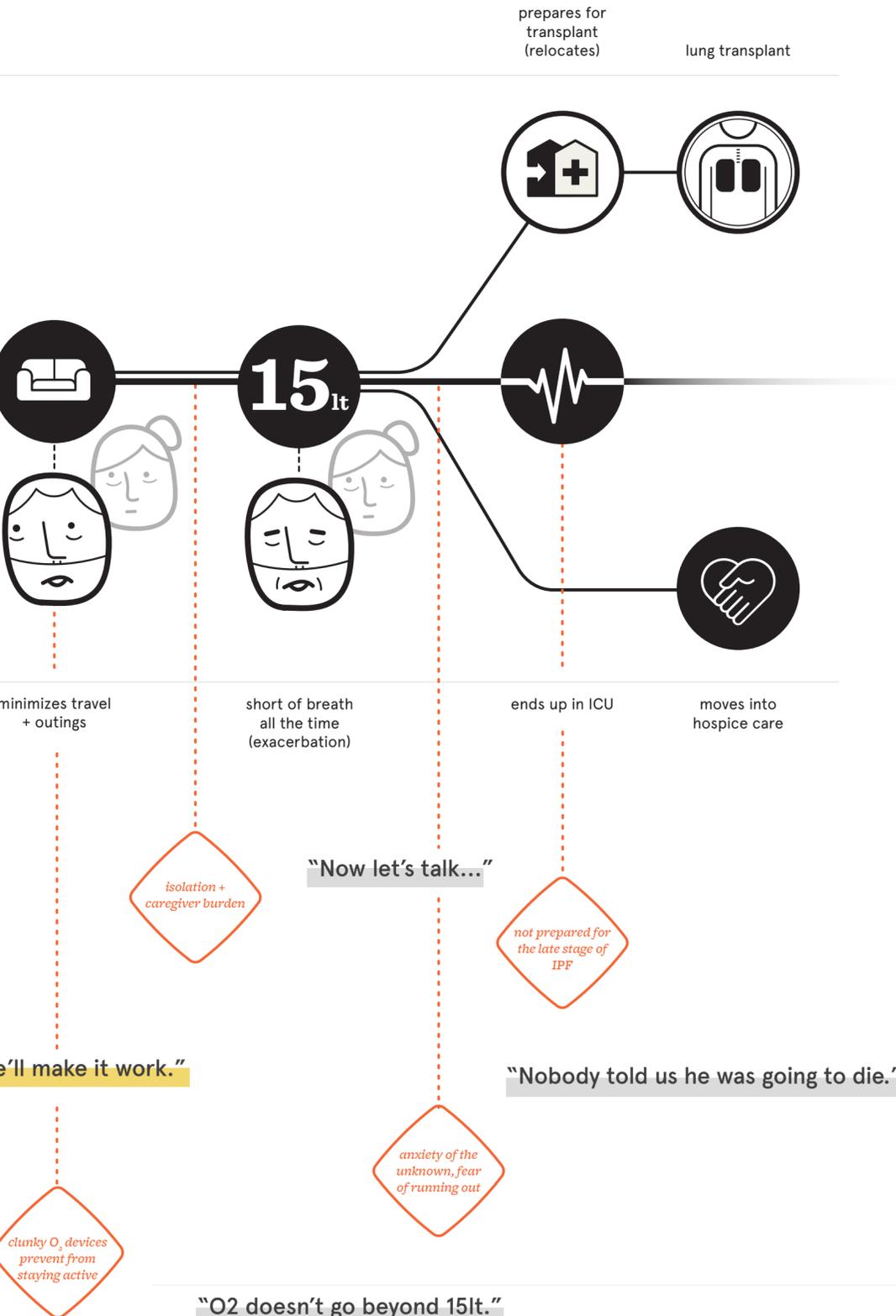


"O2 doesn't go beyond 15lt."

THE HUMAN SIDE OF IPF

VISION FOR THE FUTURE

TAKING ACTION



LEAVING A LEGACY

Patients think about how they want to be remembered by friends and family and face the realities of end-of-life planning.

Vision for the future

How much **better** could the future be?

We know what the current experience is like living with IPF. But if there were more patient-centered products and services for this population, we could change that story.

Taking Action

WHY NOW

Moving from invisible disease to visible opportunities

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Clinicians are desperate for
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The industry is recognizing the opportunities in addressing IPF.

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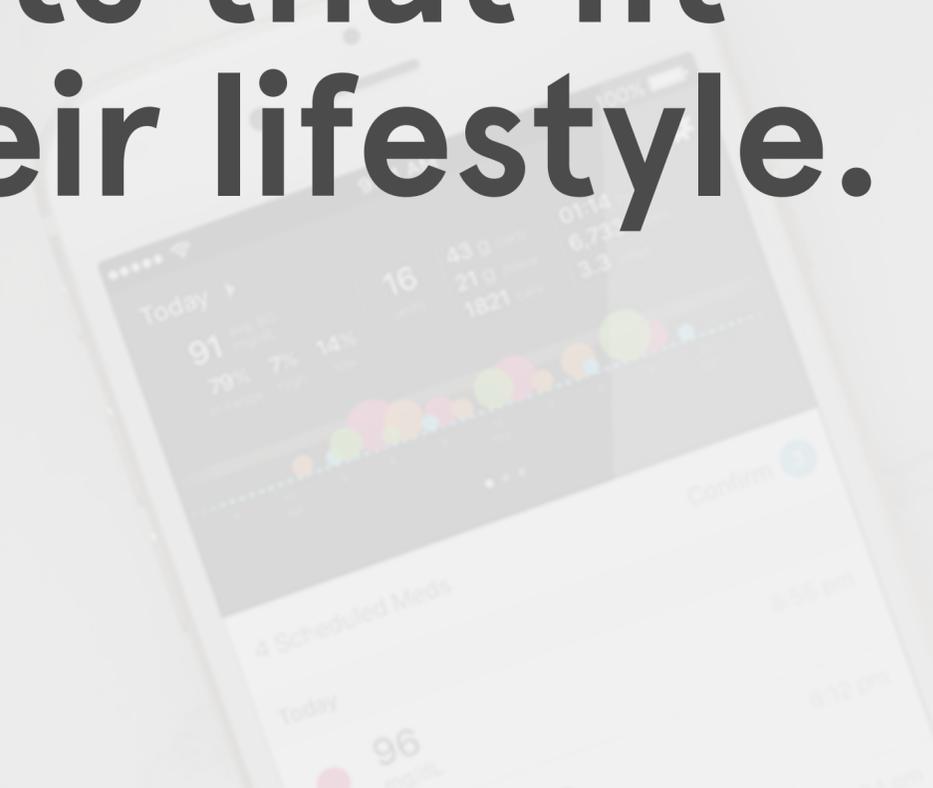
Patients are creating their own networks of support.

WHY NOW

**Patients expect
more from
out-of-pocket
dollars.**

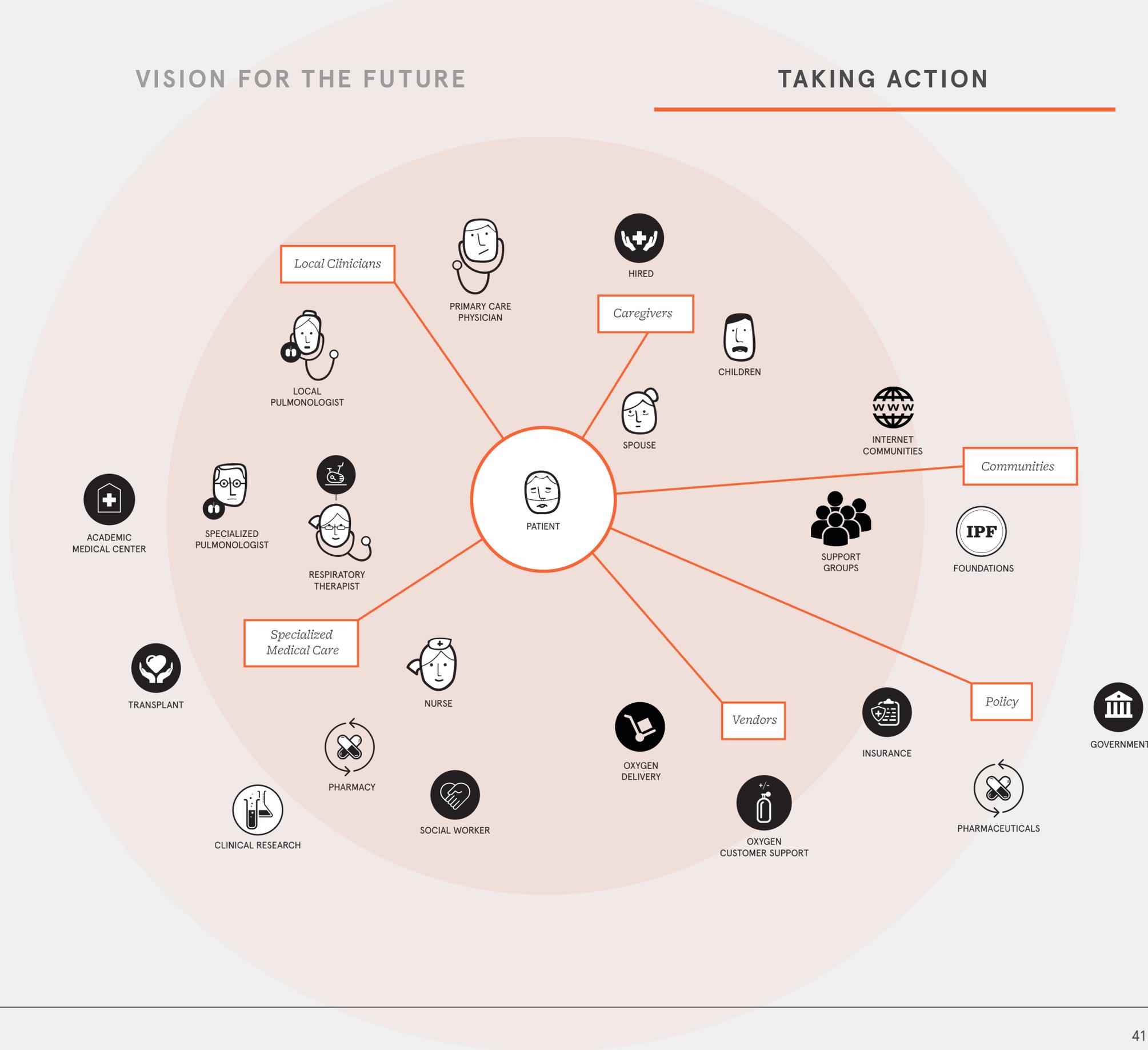
WHY NOW

**As consumers,
patients want
products that fit
into their lifestyle.**



STAKEHOLDER MAP

This shows the common players that influence the IPF patient's experience. There's an opportunity to create a tighter, more supportive, network of care around the patient.



WHERE TO TAKE ACTION

EARLY DETECTION

How might we detect IPF earlier and create a smoother path to care?

EDUCATION

How might we educate and ready patients for the unknown?

DATA + OXYGEN

How might we generate insights on IPF by collecting real-time data through oxygen therapy?

LATE STAGE SUPPORT

How might we make quality of life better in the advanced stages of IPF?

HOW MIGHT WE

**detect IPF earlier
and create a smoother
path to care?**

WHY IT MATTERS

After a confirmed diagnosis, patients scramble to grasp the seriousness while families try to adjust and physicians strive to set clear expectations. This **situational spiral prevents constructive planning and preparation** for all involved.

WHO WILL BENEFIT:



Patients could better advocate for themselves by knowing their options and what to expect



Caregivers could have more tools to be a better caregiver, delivered to them compassionately, reducing the guilt they may feel along the way



Clinicians could be more efficient with their limited patient time, able to focus on the complex questions



Payers could benefit from lower medical costs, as patients can better manage their condition, exacerbation events, potentially minimizing ICU visits, and better planning for end of life

HOW MIGHT WE

**generate insights on IPF by
collecting real-time data
through oxygen therapy?**

WHY IT MATTERS

Today's standard practice involves clinical visits / testing every 3-6 months along with prescribed oxygen. Because the disease progresses unpredictably, understanding the time between visits and how oxygen supports the patient beyond the clinic could unlock new information for IPF. A **smarter oxygen therapy system, collecting real-time data**, could allow Clinicians to provide more responsive care to their patients.

WHO WILL BENEFIT:



Patients could be more informed on when it's time to get care or a new prescription for oxygen therapy



Caregivers could feel more informed on how the patient is doing over time and have a better idea when to get them additional help



Oxygen Industry could adopt new technologies, creating additional value for their devices and usage



Clinicians could set ever-improving practice standards based on newly-collected data



Pulmonary Rehab could see an increase in referrals, especially if Payers see more value in reimbursing as an IPF therapy



Payers could gain more understanding of oxygen therapy and pulmonary rehab benefits for IPF patients, identifying needs for coverage



Clinical Research could potentially identify new correlations or pattern creating expertise on IPF

HOW MIGHT WE

**make quality of life
better in the advanced
stages of IPF?**

WHY IT MATTERS

While the disease progression is unpredictable, everyone with IPF experiences eventual exacerbations, leading to higher oxygen needs, decline in physical abilities, and an increase in anxiety. With more advanced oxygen products and more human services, these families can be supported with a more **comfortable and meaningful experience in the late stage** of IPF.

WHO WILL BENEFIT:



Patients could be more empowered to live out their final years at home with devices that support them through their final days



Caregivers could feel more prepared for what's to come, knowing the onus is not just on them during this difficult stage



Speciality Centers could see a rise in patients taking advantage of palliative care, minimizing the high percentage of patients ending up in ICU



Oxygen Industry could see an increase in demand to support patients' for longer term care



Payers could benefit from patients who are more active throughout their care, potentially minimizing the costs of mental healthcare and reducing ICU and end-of-life care costs



BALLOON