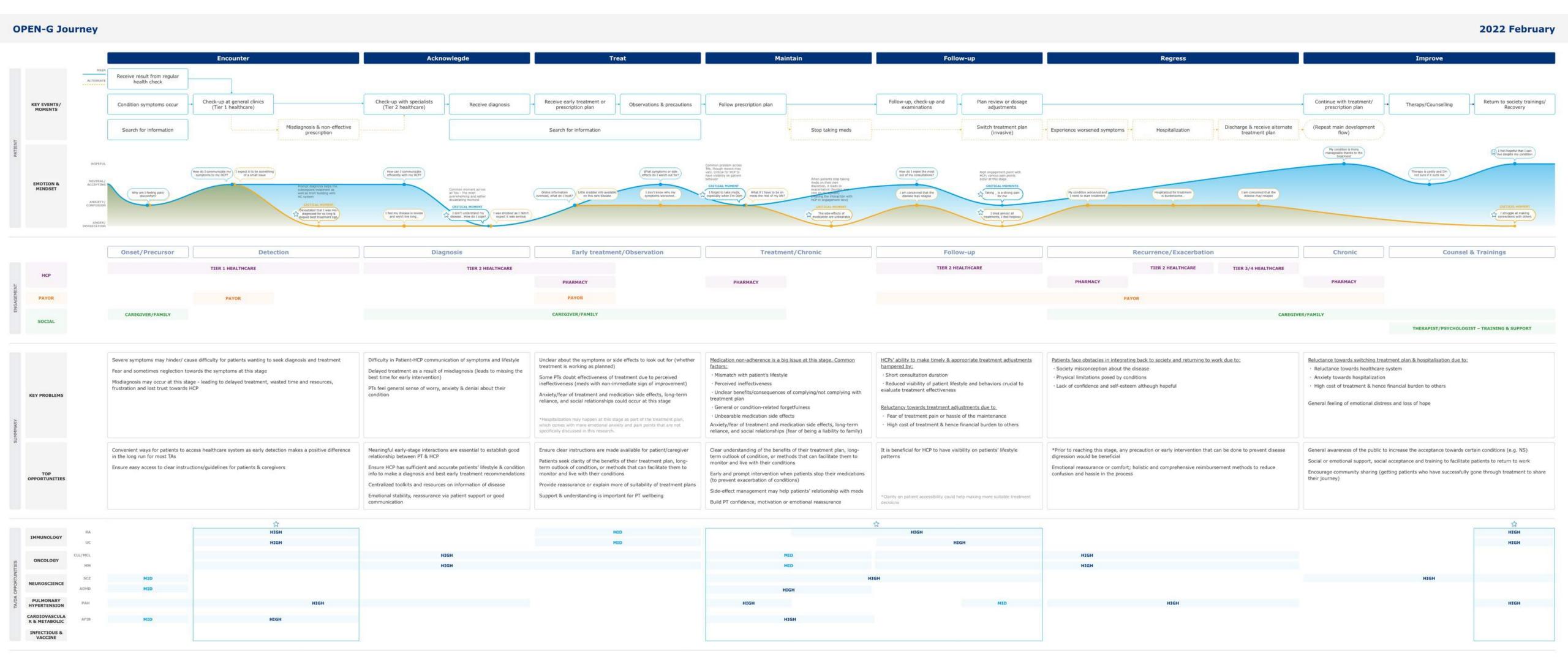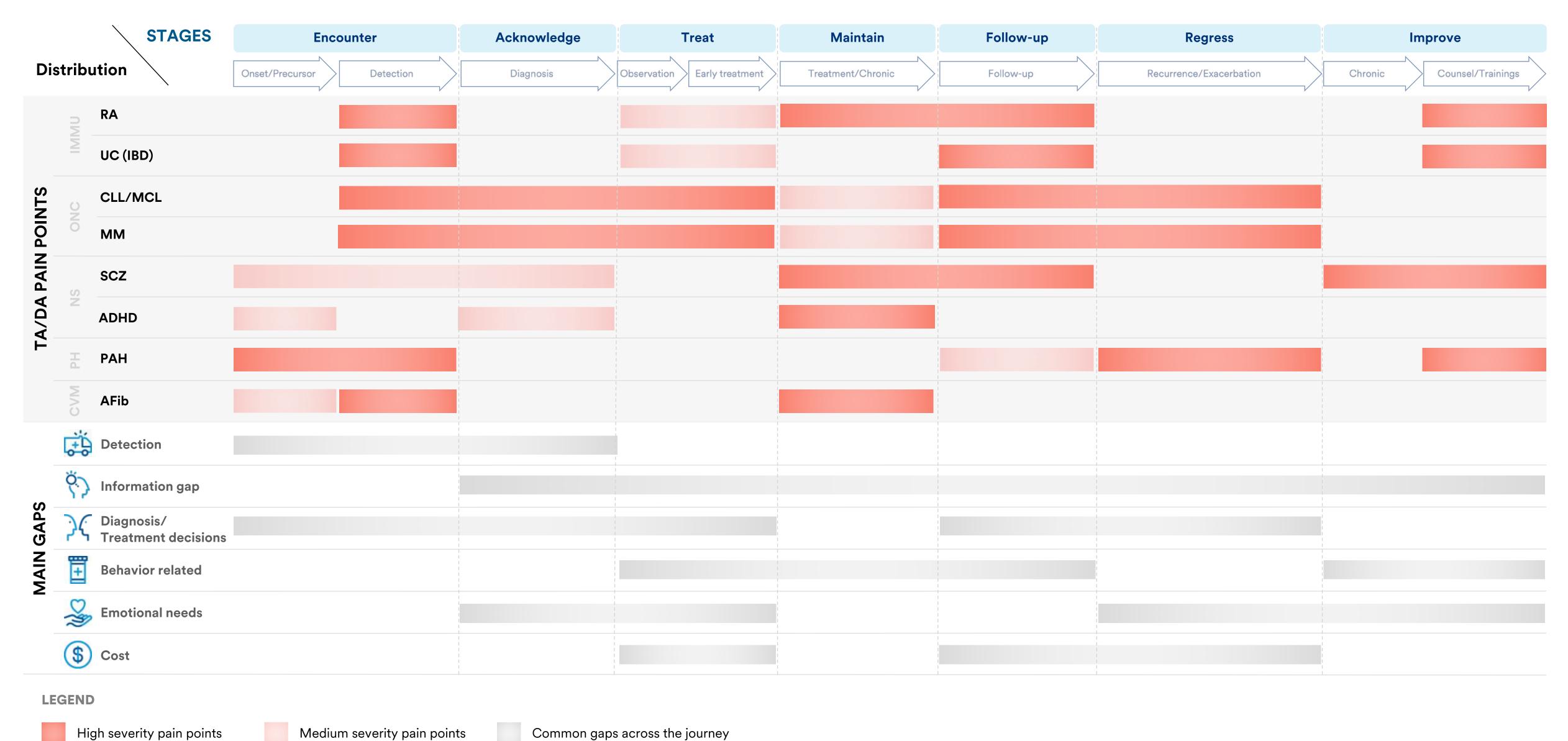# Patient journey map [Click to view full PT Journey →](#)

A catalogue of key events, engagement, pain points and opportunities throughout the patient journey

Note: More details on different stages of the patient journey can be found in the extended section. Remember, this is an evolving asset that can be updated frequently.   Step 1: Problem space

Distribution of pain points & main gaps across the patient journey

Distribution	STAGES	Encounter		Acknowledge	Treat		Maintain	Follow-up	Regress		Improve	
		Onset/Precursor	Detection	Diagnosis	Observation	Early treatment	Treatment/Chronic	Follow-up	Recurrence/Exacerbation		Chronic	Counsel/Trainings

TA/DA PAIN POINTS

		Onset/Precursor	Detection	Diagnosis	Observation	Early treatment	Treatment/Chronic	Follow-up	Recurrence/Exacerbation	Chronic	Counsel/Trainings
IMMU	RA		■		■		■	■			■
	UC (IBD)		■		■			■			■
ONC	CLL/MCL		■		■		■	■			
	MM		■		■		■	■			
NS	SCZ	■					■			■	
	ADHD	■		■			■				
PH	PAH	■						■	■		■
CVM	AFib	■					■				

MAIN GAPS

		Onset/Precursor	Detection	Diagnosis	Observation	Early treatment	Treatment/Chronic	Follow-up	Recurrence/Exacerbation	Chronic	Counsel/Trainings
	Detection	■									
	Information gap			■						■	
	Diagnosis/Treatment decisions	■						■			
	Behavior related			■						■	
	Emotional needs			■					■		
	Cost				■		■				

LEGEND

■ High severity pain points ■ Medium severity pain points ■ Common gaps across the journey

Solution ideas across patient journey are categorized* into 5 main areas of opportunities to tackle the problem space

Awareness/Info

Raise awareness, knowledge and make credible info more discoverable & accessible

OUTCOMES

- Early detection, accurate diagnosis and suitable/effective treatment
- Provide patients with more clarity on their DA (less anxiety)

HCP – PT communication

Improve & facilitate effective HCP & patient interactions and information exchange

OUTCOMES

- Patient cultivates higher level of trust in HCP
- HCP has more visibility/understanding of their patient, enabling them to make better treatment decisions
- Less miscommunications

Patient support

Support for patient's emotional well-being (involve family & friends)

OUTCOMES

- Patient has a healthy support system
- Patient has higher confidence in managing & living with their condition

Sensors & tracking

Tools that track or monitor patient status (automatic, participatory & engagement tracking)

OUTCOMES

- HCP has more visibility/understanding of their patient, enabling them to make better treatment decisions
- More accurate and comprehensive data
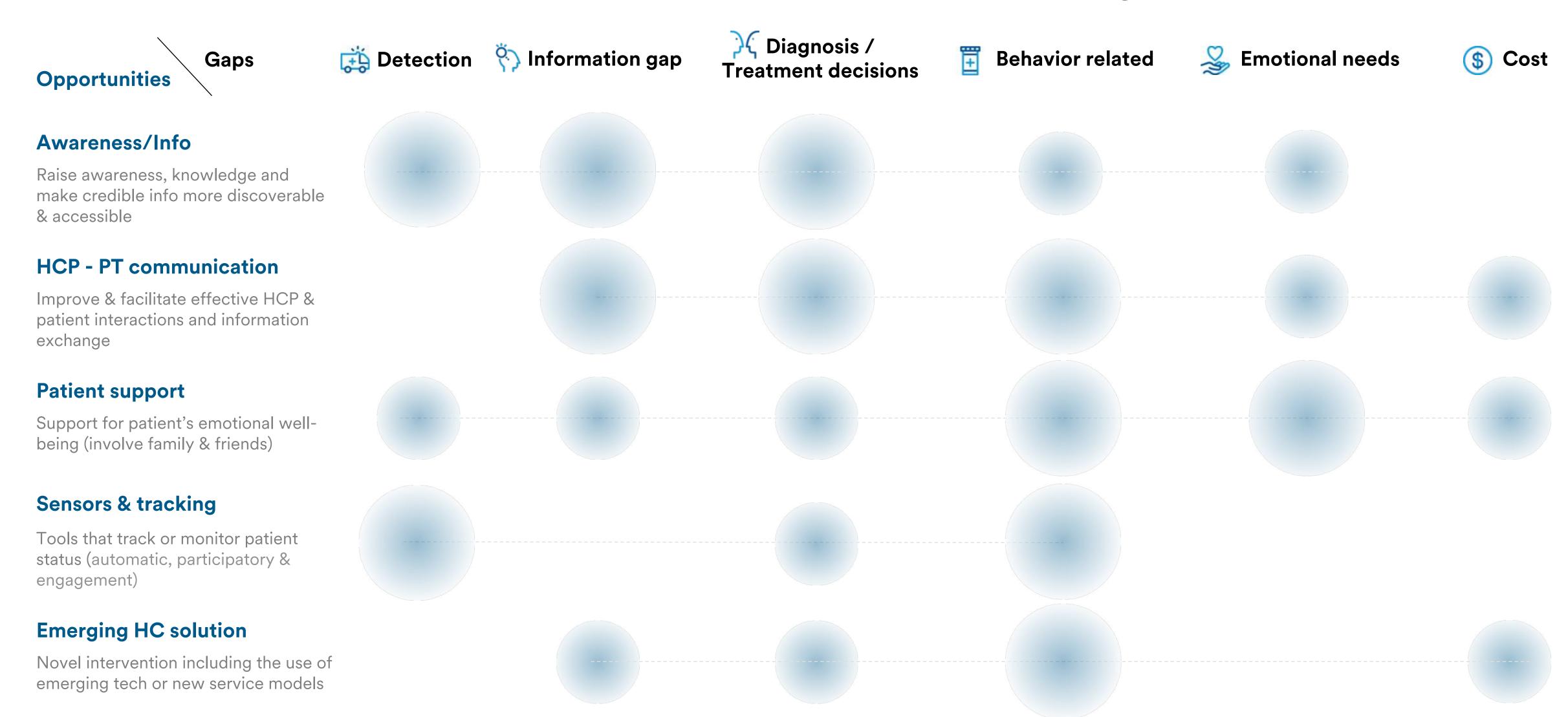- Keeps patients more accountable for their medication behavior

Emerging HC solution

Novel interventions including the use of emerging technologies or new service models

OUTCOMES

- Usually brings more convenience to patients
- Brand recognition opportunities
- Future-oriented solutions

*Categorized based on aggregating all solution ideas across the patient journey map

The 5 main areas of opportunities apply across the main gaps

Opportunities / Gaps	Detection	Information gap	Diagnosis / Treatment decisions	Behavior related	Emotional needs	Cost
Awareness/Info Raise awareness, knowledge and make credible info more discoverable & accessible	●	●	●	●	●	
HCP - PT communication Improve & facilitate effective HCP & patient interactions and information exchange		●	●	●	●	●
Patient support Support for patient's emotional well-being (involve family & friends)	●	●	●	●	●	●
Sensors & tracking Tools that track or monitor patient status (automatic, participatory & engagement)	●		●	●		
Emerging HC solution Novel intervention including the use of emerging tech or new service models		●	●	●		●

LEGEND

Gaps Main gaps across journey

● Relevancy of opportunities

PATIENT

Encounter

KEYWORD: ACCESS, AWARENESS

Patient Journey (Emotion Curve)

Emotional levels:
- HOPEFUL
- NEUTRAL/ACCEPTING
- ANXIETY/CONFUSION
- ANGER/DEVASTATION

Speech/annotations:
- Why am I feeling pain/discomfort?
- WORRY
- How do I communicate my symptoms to my HCP?
- I expect it to be something of a small issue
- NEUTRAL
- CRITICAL MOMENT
- Devastated that I was mis-diagnosed for so long & missed best treatment opp.
- DISAPPOINTMENT

STAGE

Onset/Precursor	Detection

MOMENTS

Onset/Precursor
- Experience symptoms
- Receive health check results

Detection
- Check up at general clinics
- Misdiagnosis & non-effective prescriptions

PAIN POINTS

Onset/Precursor
- Exhaustion, discomfort, pain
- Patients neglect the symptoms
- Daily life affected
- Physical inability to seek treatment (pain/mental state)
- Difficulty sharing/describing pain to the people around
- Reluctancy to seek check-up

Check up at general clinics
- Short consultation duration
- Unable to articulate symptoms to HCP or not sure what to communicate
- Short consultation duration
- Insufficient info on patient
- Lack of clear info on suitable specialists for referral

Misdiagnosis & non-effective prescriptions
- Misdiagnosis lead to missing the best time for early intervention
- Diminished trust in HCP after misdiagnosis
- This may be overlooked for years
- Wasted time and resource due to the misdiagnosis

GAPS

Fear, neglect and severe symptoms lead to delay in check-ups

Misdiagnosis may occur at this stage (may last years)

RA	Misdiagnosis, physical pain, affect normal life
IBD	Misdiagnosis, physical pain, affect normal life
CCL/MCL	Some physical discomforts
MM	May start as asymptomatic
SCZ	Neglect or refuse to check-up
ADHD	Neglect or refuse to check-up
PAH	Hard to detect
AFIB	Hard to detect

OPPORTUNITIES

Easy access to the healthcare system, as early detection/interventions makes a positive difference in the long run for most TAs

Easy access to clear instructions/guidelines for patients & caregivers

Better awareness for tier 1 healthcare system towards the DA symptoms

Clear & easy access to specialist referral

SOLUTION IDEAS

AWARENESS/INFO

Centralised platform with organized, comprehensive and credible explanations of DA for HCP & PT

Upfront & clear description of medication, diagnosis and outcomes

HCP - PT (COMMUNICATION)

Accessible HCP dashboard for better understanding of patients' info, lifestyles & symptoms

Asynchronous chat platform for patients to view & follow up conversations post consultation
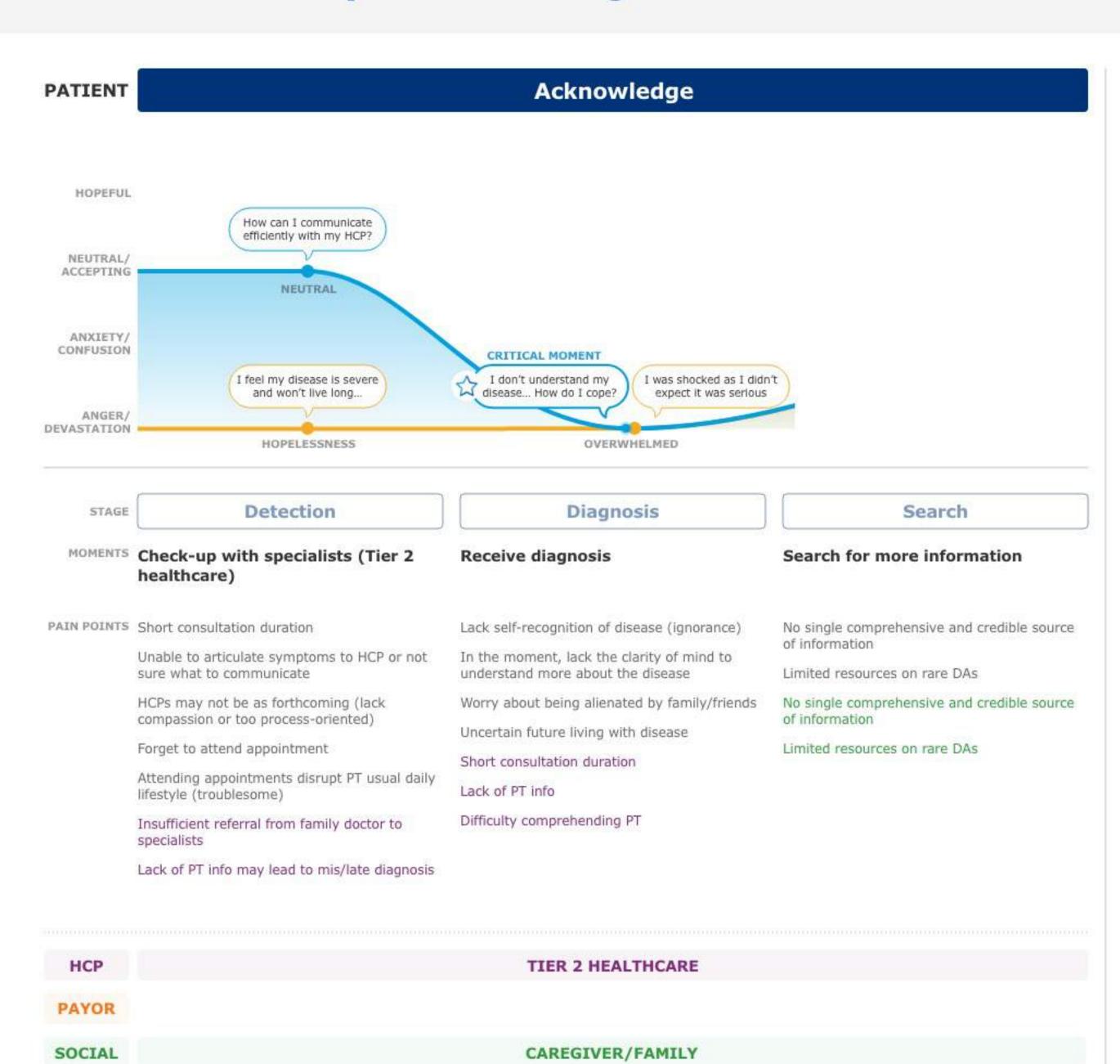
Online consultation to get second opinion

SENSORS & TRACKING

Tracker that registers bio-markers for alerting signs

EMERGING HEALTHCARE SOLUTION

Quick ways to seek medical care (with emerging tech)

HCP   TIER 1 HEALTHCARE

PAYOR   PAYOR

SOCIAL   CAREGIVER/FAMILY

PATIENT — Acknowledge

KEYWORD: REASSURANCE, AWARENESS

Emotional journey axis: HOPEFUL / NEUTRAL/ACCEPTING / ANXIETY/CONFUSION / ANGER/DEVASTATION

- How can I communicate efficiently with my HCP?
- NEUTRAL
- CRITICAL MOMENT
- I feel my disease is severe and won't live long...
- I don't understand my disease... How do I cope?
- I was shocked as I didn't expect it was serious
- HOPELESSNESS
- OVERWHELMED

STAGE

Detection	Diagnosis	Search

MOMENTS

- **Check-up with specialists (Tier 2 healthcare)**
- **Receive diagnosis**
- **Search for more information**

PAIN POINTS

Detection:
- Short consultation duration
- Unable to articulate symptoms to HCP or not sure what to communicate
- HCPs may not be as forthcoming (lack compassion or too process-oriented)
- Forget to attend appointment
- Attending appointments disrupt PT usual daily lifestyle (troublesome)
- Insufficient referral from family doctor to specialists
- Lack of PT info may lead to mis/late diagnosis

Diagnosis:
- Lack self-recognition of disease (ignorance)
- In the moment, lack the clarity of mind to understand more about the disease
- Worry about being alienated by family/friends
- Uncertain future living with disease
- Short consultation duration
- Lack of PT info
- Difficulty comprehending PT

Search:
- No single comprehensive and credible source of information
- Limited resources on rare DAs
- No single comprehensive and credible source of information
- Limited resources on rare DAs

HCP — TIER 2 HEALTHCARE

PAYOR

SOCIAL — CAREGIVER/FAMILY

GAPS

Delay in check-ups, limited duration and difficulty in communication with HCP may lead to misdiagnosis

Worry, anxiety, overwhelm & denial

RA	Sometimes overlooked for years, worry & anxiety
IBD	Sometimes overlooked for years, worry & anxiety
CCL/MCL	Shock & overwhelmed; painful checkup process
MM	Emotional distress - shock & overwhelmed
SCZ	Denial
ADHD	-
PAH	Miss the best treatment window due to misdiagnosis
AFIB	-

OPPORTUNITIES

Meaningful early-stage interactions are essential to establish good relationship between PT & HCP

Ensure HCP has sufficient and accurate patients' lifestyle & condition info to make a diagnosis and best early treatment recommendations

Centralized toolkits and resources on information of disease and its symptoms

Establish emotional stability, reassurance via patient support or good communication

SOLUTION IDEAS

AWARENESS/INFO

Regular seminars to share latest updates on different DAs

Upfront & clear description of medication, diagnostics & outcomes

(For patient) Centralised platform with organised, comprehensive and credible explanations of the DA

HCP - PT (COMMUNICATION)

Accessible HCP dashboard for better understanding of patients' condition and lifestyle

Asynchronous chat platform for patients to view & follow up conversations post consultation

PATIENT SUPPORT

Forum to connect with patients of same diagnosis

EMERGING HEALTHCARE SOLUTION

System that syncs patient info & data across different medical intuitions/unit to minimize repeated information (potentially partner w/ JP government efforts)

PATIENT

Treat

Online information overload, what do I trust?

Little credible info available on this rare disease

What symptoms or side effects do I watch out for?

NEUTRAL

I don't know why my symptoms worsened...

FRUSTRATION

CONFUSED

HOPEFUL · NEUTRAL/ACCEPTING · ANXIETY/CONFUSION · ANGER/DEVASTATION

STAGE	Search	Early treatment	Observation/Precaution
MOMENTS	Search for more information	Receive early treatment or prescription plan	Observations & precautions
PAIN POINTS	No single comprehensive and credible source of information	Unsure about effectiveness and suitability of the treatment option	Unsure what symptoms (or level of conditions) to look out for
	Limited resources on rare DAs	Anxious about effectiveness, safety and financing of treatment	Unsure what symptoms (or level of conditions) to look out for
	No single comprehensive and credible source of information	Fear of treatment/medication side effects	Lack visibility on how patients are coping with treatment & medication
	Limited resources on rare DAs	Worry about cost of treatment	
		Worry about financial cost of treatment	

HCP	TIER 2 HEALTHCARE		
		PHARMACY	
PAYER		PAYER	
SOCIAL	CAREGIVER/FAMILY		

KEYWORD: CLARITY, COMPREHENSIVE INFORMATION

GAPS

A lot of uncertainties towards effectiveness of treatment and symptoms to look out for; financial and long-term concerns start to occur; unsure what info sources to trust

RA	Information legibility
IBD	Unsure what worsens the symptoms
CCL/MCL	Physical discomfort, worry for future, little avail info
MM	Hope for early treatment effectiveness
SCZ	Mental clarity is affected by condition
ADHD	Unmotivated, lack of self-recognition
PAH	Hard to gain understanding; QOL is affected
AFIB	Caution about other co-morbidities

OPPORTUNITIES

Ensure clear instructions are made available for patient/caregiver

Patients seek clarity of the benefits of their treatment plan, long-term outlook of condition, or methods that can facilitate them to monitor and live with their conditions

Provide reassurance or explain more of suitability of treatment plans

Support & understanding is important for PT wellbeing

SOLUTION IDEAS

AWARENESS/INFO

Storytelling interventions to visualize consequences/benefits of personal health decisions

Support toolkit for caregiver with tips on how to help patients

HCP - PT (COMMUNICATION)

AI/Voice assistance from HCP

Accessible HCP dashboard for better understanding of PT

PATIENT SUPPORT

Greater sync of insurer details in a patient support app

Mentorship programs (e.g. recovered mentor - patient mentee)
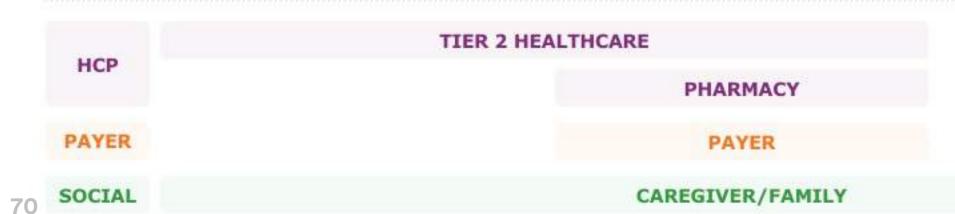
SENSORS & TRACKING

Tools that keep track & monitor symptoms for PT & HCP

Self monitoring digital therapy tools (e.g. for socio-emotional management)

EMERGING HEALTHCARE SOLUTION

VR Programs for pain management

PATIENT

Maintain

KEYWORD: BEHAVIOR, MOTIVATION

HOPEFUL

NEUTRAL/ACCEPTING

ANXIETY/CONFUSION

ANGER/DEVASTATION

CRITICAL MOMENT

> I forget to take meds, especially when I'm OOH

> What if I have to be on meds the rest of my life?

FRUSTRATION

> The side-effects of medication are unbearable

UNBEARABLE

IMPROVE >

REGRESS >

STAGE

| Chronic phase | Disease digression |

MOMENTS

Follow prescription plan

Stop taking medications

PAIN POINTS

Medication timing doesn't fit to patients' life rhythm

General or condition-related forgetfulness

Trouble taking medication in public

Discomfort from meds side effects

Lack of visibility on patient lifestyle for better treatment recommendation

Not sure how to help PTs better follow prescription plan

Not aware if PT truthfully follow prescription plan (swallow meds)

Common factors contributing to med non-adherence:

· Mismatch with patient's lifestyle

· Perceived ineffectiveness

· Unclear benefits/consequences of complying/not complying with treatment plan

· Unbearable medication side effects

· High cost of treatment

Anxiety/fear of treatment and medication side effects, long-term reliance, and social relationships (fear of being a liability to family)

Lack of visibility on patient status (don't realize PT stopped treatment plan)

PTs stop treatment at their own discretions (without understanding consequences)

HCP

PHARMACY

PAYER

SOCIAL

CAREGIVER/FAMILY

GAPS

Medication non-adherence (caused by various factors) is one of the common problems at this stage.

RA — Afraid of side effects; keep track of symptoms & drug effectiveness; forget injections; cost

IBD — Afraid of side effects; keep track of lifestyle & symptoms; forget injections; cost

CCL/MCL — Physical discomfort; slim hope on donor; limited treatment / medications; cost & digression concern

MM — Prolonged treatment; cost & digression concern

SCZ — Disease related forgetfulness; side effects; gaps in perception

ADHD — Disease related forgetfulness, gaps in perception

PAH — Condition digress regardless of treatment

AFIB — Careful watch of lifestyle

OPPORTUNITIES

Raise awareness to help patients have a clearer understanding and see future benefits & consequences

Early & prompt intervention when patients stop their medications (to prevent exacerbation of conditions)

Side-effect management may help some patients' relationship with medication behavior

Build confidence, motivation or emotional reassurance (via HCP, tools or support group)

SOLUTION IDEAS

AWARENESS/INFO

Tool with checklist of symptoms and corresponding actions

Tool that keeps track of medication instruction

Storytelling interventions to visualize the benefits & consequences of personal health decisions

HCP - PT (COMMUNICATION)

Track & seamlessly communicate symptoms and irregular medication intake patterns to HCP

PATIENT SUPPORT

Family & friends to be informed about patients' med intake

SENSORS & TRACKING

Holistic solution that tracks and reminds med taking

Solution that prioritize effective reminders to achieve a closed loop system*

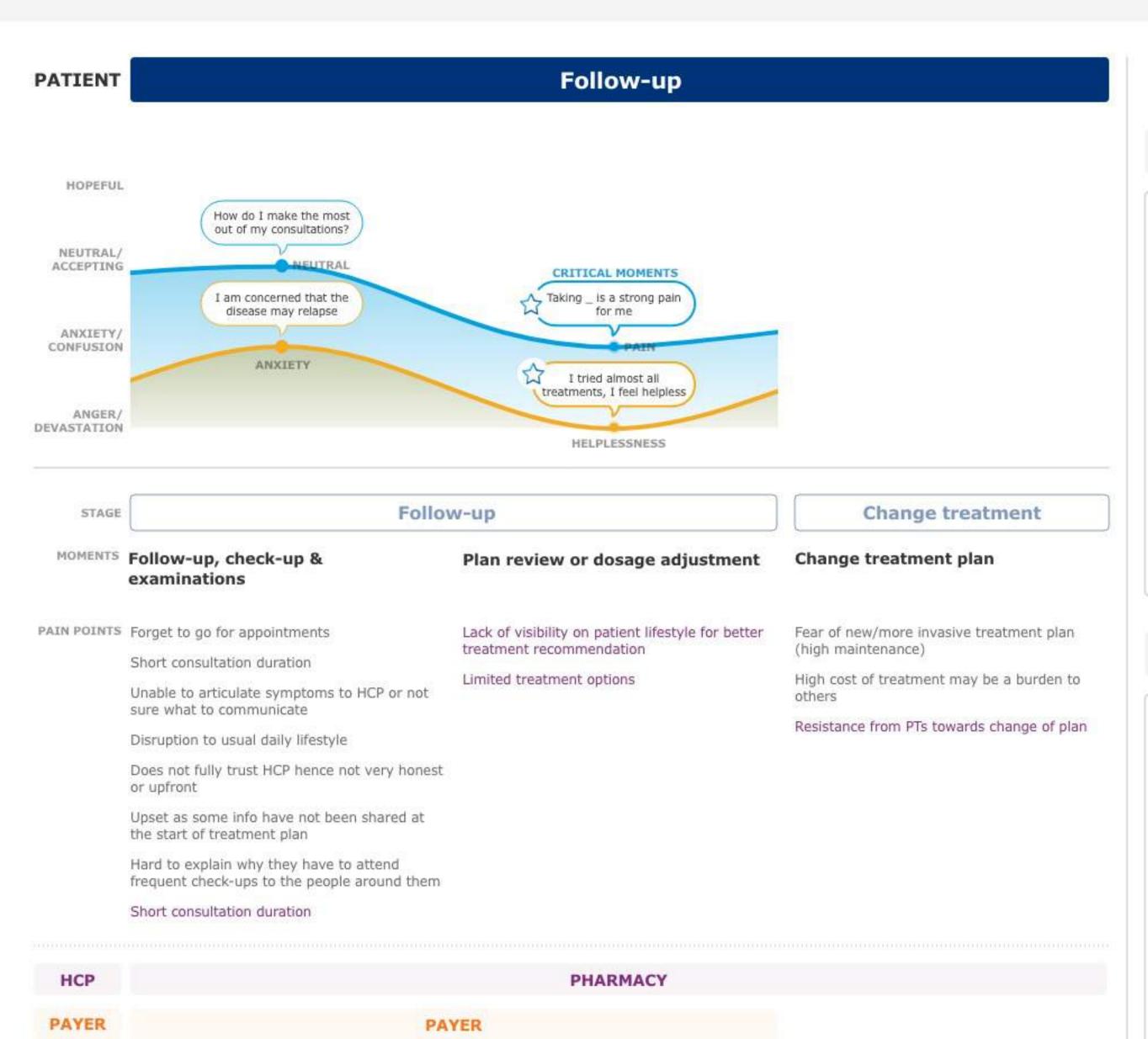Rewards and gamification system to promote better adherence behavior (building habits)

Environmental sensors in patients living environment to keep track of patient wellbeing and alert signals

EMERGING HEALTHCARE SOLUTION

Medicine in alternate forms (e.g. food)

Personalized medicine (e.g. 3D printed medication)

PATIENT — Follow-up

KEYWORD: EFFICIENCY, PERSUASION

Emotional journey (axis)

- HOPEFUL
- NEUTRAL/ACCEPTING
- ANXIETY/CONFUSION
- ANGER/DEVASTATION

- How do I make the most out of my consultations? — NEUTRAL
- I am concerned that the disease may relapse — ANXIETY
- **CRITICAL MOMENTS** — Taking _ is a strong pain for me — PAIN
- I tried almost all treatments, I feel helpless — HELPLESSNESS

STAGE

Follow-up	Change treatment

MOMENTS

Follow-up, check-up & examinations	Plan review or dosage adjustment	Change treatment plan

PAIN POINTS

Follow-up, check-up & examinations
- Forget to go for appointments
- Short consultation duration
- Unable to articulate symptoms to HCP or not sure what to communicate
- Disruption to usual daily lifestyle
- Does not fully trust HCP hence not very honest or upfront
- Upset as some info have not been shared at the start of treatment plan
- Hard to explain why they have to attend frequent check-ups to the people around them
- Short consultation duration

Plan review or dosage adjustment
- Lack of visibility on patient lifestyle for better treatment recommendation
- Limited treatment options

Change treatment plan
- Fear of new/more invasive treatment plan (high maintenance)
- High cost of treatment may be a burden to others
- Resistance from PTs towards change of plan

Stakeholders

HCP	PHARMACY
PAYER	PAYER
SOCIAL	CAREGIVER/FAMILY

GAPS

HCP's lack of visibility on patients lifestyle & behaviors and resistance from patients makes it difficult to recommend a suitable treatment decision

RA	Keep track of and communicate symptoms & pain levels to HCP; worry about BIO side effect
IBD	Discomfort in check-up; unease to communicate symptoms to HCP; worry about BIO side effect
CCL/MCL	Discomfort in check-up; worry about relapse; treatment affect QOL
MM	Cost burden on patients; worry about digression
SCZ	forget about check-up; irregular adherence; resistance to LAI treatment
ADHD	Gaps in patient perception; forget about check-up
PAH	Tedious check-up process; worry about invasive treatment
AFIB	Worry about co-morbidities

OPPORTUNITIES

It is beneficial for HCP to have visibility on patients' lifestyle patterns

*Clarity on patient accessibility could help making more suitable treatment decisions

SOLUTION IDEAS

AWARENESS/INFO
Regular seminars to share latest updates on diff. DAs

- Info program that communicates treatment benefits
- Presenting bite-sized symptoms info and treatment instructions to reduce cognitive overload on PT & caregiver

HCP - PT (COMMUNICATION)
- Intelligent system that helps HCP in decision making

Integrated system of in-person & virtual consultation with HCP for trust building and greater convenience

Asynchronous chat platform for patients to view & follow up conversations post consultation

PATIENT SUPPORT
Support from social groups (e.g.: communities or forum) for more info or additional reassurance

SENSORS & TRACKING
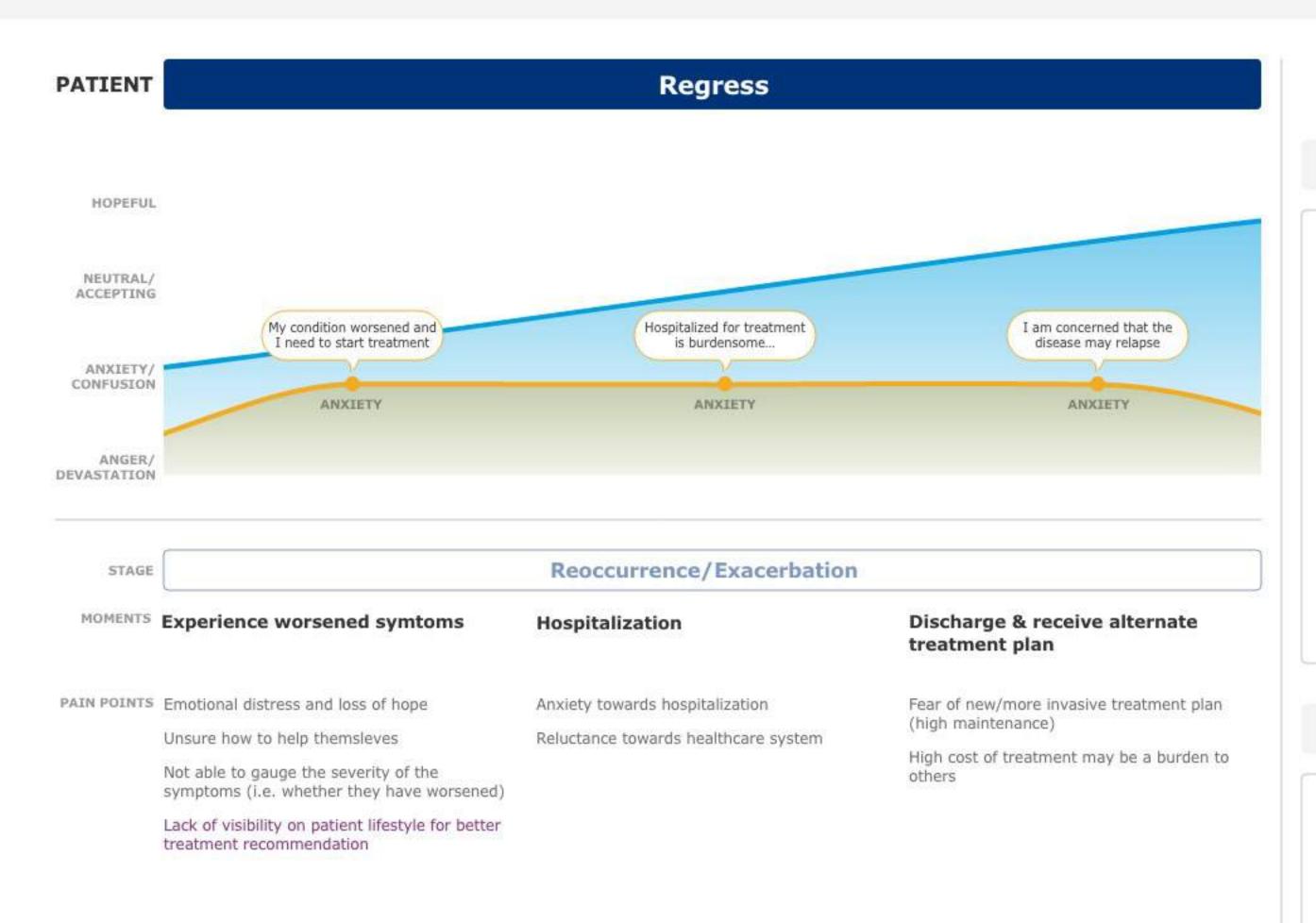Service that timely collects patient lifestyle & medication data

- Self monitoring digital therapy tools (e.g. for socio-emotional management)

EMERGING HEALTHCARE SOLUTION
- Consultation with simulation tool (e.g. VR) for PT to manage symptoms and anticipate therapy procedures

PATIENT

Regress

KEYWORD: MOTIVATION, EMOTION MANAGEMENT

HOPEFUL

NEUTRAL/
ACCEPTING

ANXIETY/
CONFUSION

ANGER/
DEVASTATION

My condition worsened and I need to start treatment

ANXIETY

Hospitalized for treatment is burdensome...

ANXIETY

I am concerned that the disease may relapse

ANXIETY

STAGE

Reoccurrence/Exacerbation

MOMENTS

Experience worsened symtoms

Hospitalization

Discharge & receive alternate treatment plan

PAIN POINTS

Emotional distress and loss of hope

Unsure how to help themsleves

Not able to gauge the severity of the symptoms (i.e. whether they have worsened)

Lack of visibility on patient lifestyle for better treatment recommendation

Anxiety towards hospitalization

Reluctance towards healthcare system

Fear of new/more invasive treatment plan (high maintenance)

High cost of treatment may be a burden to others

HCP

| TIER 2 HEALTHCARE |
| PHARMACY |

| TIER 3 HEALTHCARE |

PAYER

PAYER

SOCIAL

CAREGIVER/FAMILY

GAPS

Emotional distress, loss of hope, anxiety towards hospitals and fear of being financially burdened

RA — Worry about weakened medication effects & long term cost

IBD — Worry about weakened medication effects & long term cost

CCL/MCL — Afraid of immunotherapy & cost of long term medication

MM — Fear of being financial burden; high cost; hopeless

SCZ — Invasive treatment; burden to caregivers

ADHD — -

PAH — Invasive treatment; impact on social & QOL; when severe, cannot move by oneself and hard to find lung transplant

AFIB — Co-morbidities and treatment complications; additional cautions

OPPORTUNITIES

Prior to reaching this stage, any precaution or early intervention that can be done to prevent disease digression would be beneficial

Emotional reassurance or comfort; holistic and comprehensive reimbursement methods to reduce confusion and hassle in the process

SOLUTION IDEAS

HCP - PT (COMMUNICATION)

Dashboard to keep track & monitor patients' conditions

Clear & timely communication between nurses & HCPs

Accessible HCP dashboard for better understanding of patients' condition and lifestyle

PATIENT SUPPORT

Discharge info & treatment plans made available and accessible to family & caregiver as well
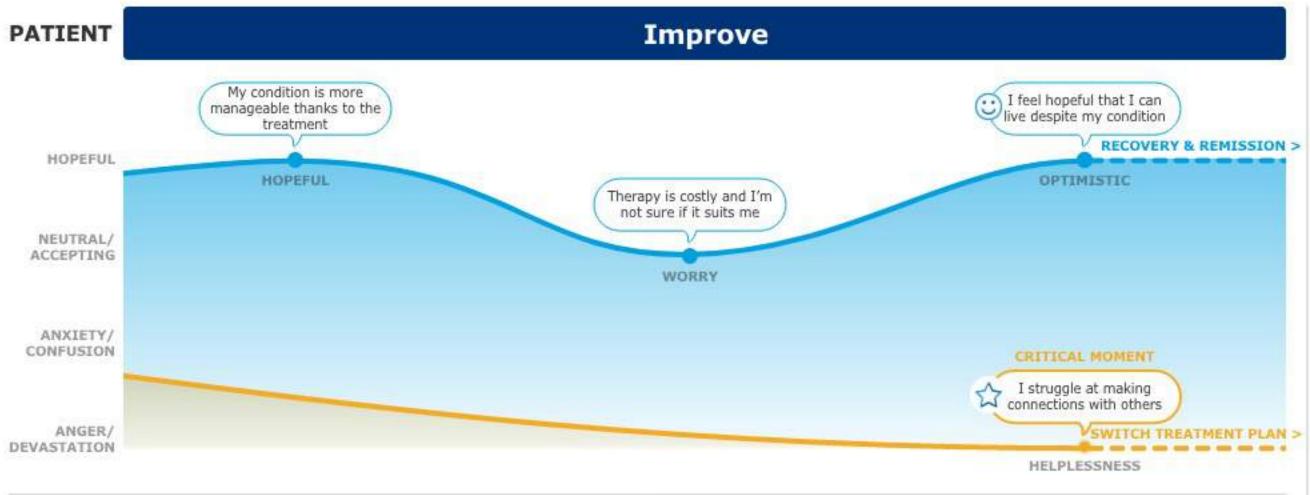
💡 Adding psychological intervention on top of regular treatment for better result

EMERGING HEALTHCARE SOLUTION

VR Programs for pain management

Integrated healthcare & insurance services for seamless bill handling

PATIENT — Improve

KEYWORD: CONFIDENCE BUILDING, GENERAL AWARENESS

Emotional journey

- My condition is more manageable thanks to the treatment
- HOPEFUL
- I feel hopeful that I can live despite my condition
- OPTIMISTIC — RECOVERY & REMISSION >
- Therapy is costly and I'm not sure if it suits me
- WORRY
- CRITICAL MOMENT
- I struggle at making connections with others
- SWITCH TREATMENT PLAN >
- HELPLESSNESS

Emotion axis: HOPEFUL / NEUTRAL-ACCEPTING / ANXIETY-CONFUSION / ANGER-DEVASTATION

STAGE

Chronic	Counsel & Trainings

MOMENTS

Continue with treatment/ prescription plan | **Therapy/Counselling** | **Return to society trainings**

PAIN POINTS

Continue with treatment/ prescription plan
- Medication timing doesn't fit to patients' life rhythm
- General or condition-related forgetfulness
- Trouble taking medication in public
- Discomfort from meds side effects
- Lack of visibility on patient lifestyle for better treatment recommendation
- Not sure how to help PTs better follow prescription plan
- Not aware if PT truthfully follow prescription plan (swallow meds)

Therapy/Counselling
- Short consultation duration causing miscommunications
- Cost of therapy (extra financial burden)
- Disruption from usual daily lifestyle
- Wish to handle the problem on one's own (low perceived need)
- Fear of judgment from family & friends
- Fail to realize the availability and importance of professional mental health services (i.e. therapy & counselling)

Return to society trainings
- Fear of alienation by society, family & friends
- Physical limitation to perform certain tasks at work

Stakeholders

HCP	PHARMACY
PAYER	PAYER
SOCIAL	CAREGIVER/FAMILY
	THERAPIST/PSYCHOLOGIST

GAPS

Fear or obstacles in integrating back to society & return to work

Professional mental health care is still seen as a low perceived need (undervalued) and may not be part of the holistic treatment plan

RA	Feel better, see lesser need to go back to hospital
IBD	Feel better, see lesser need to go back to hospital
CCL/MCL	Happy with no relapse, or concern about RTW as it may relapse
MM	Come to terms with it / desease under control
SCZ	Lack of confidence & social awareness
ADHD	Wish to live without reliant on medications; communicate with people around
PAH	Some physical limitation in returning to work
AFIB	Live with disease under control

OPPORTUNITIES

Raise public awareness to increase social acceptance towards certain conditions (e.g. NS)

Social or emotional support, social acceptance and training to facilitate patients to return to work

Encourage community sharing (getting patients who have successfully gone through treatment to share their journey)

SOLUTION IDEAS

AWARENESS/INFO
Self-help tools on socio-emotional management

PATIENT SUPPORT
Adding psychological intervention on top of regular treatment

Teleconsultation for discrete yet accessible therapy

- Forum to connect patients with the same condition/diagnosis

SENSORS & TRACKING
Tracker to record PT emotional & mental wellbeing in the long run

EMERGING HEALTHCARE SOLUTION
VR Programs for pain management

- Consultation with simulation tool (e.g. VR) for PT to manage symptoms and anticipate therapy procedures

- Voice AI social care bot