## The Importance of a Long-term Follow-up Program for SCID

Morna J Dorsey, MD, MMSc

Immune Deficiency Foundation: SCID Compass

May 18, 2022



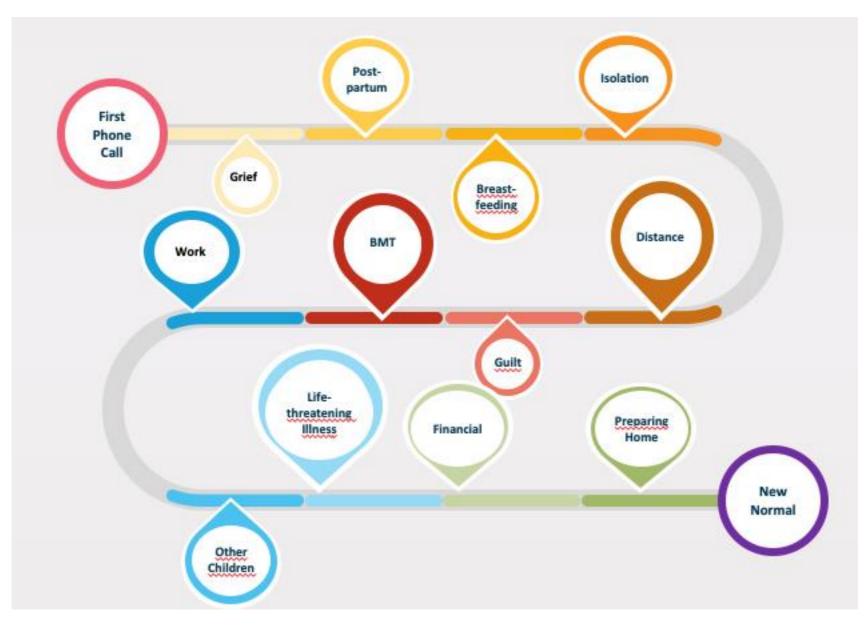


## Agenda



- The SCID Journey
- Long-term follow-up questions
- CalSCID Program
  - Needs assessment
  - Health-specific outcomes
  - Data sharing
  - Education
- Conclusion

### The SCID Journey Map



# What is Long-term Follow-up?

HRSA: "treatment and management following diagnosis and referral"

- There is no definitive way to conduct LTFU for SCID
- It is not entirely clear what LTFU should entail
  - Most centers may have similar protocols for early management
  - No SCID-specific consensus pathway for follow up beyond definitive therapy

# Why is Longterm Follow-up important?

- SCID is heterogenous
- SCID is a rare condition that requires long-term follow-up
- Care is received in diverse settings
- Lack of natural history studies
- Incomplete understanding of how factors such as treatment pathways and type of SCID impact long-term outcomes

## **Your Questions**

What are the short-term complications post-treatment that parents should be aware of?

What are the long-term complications post-treatment?

Will a child need special services in school?

Are a child's LTFU needs different based on the type of SCID they have or treatment they received?

What is the likelihood that a patient will need additional treatment when they are older?

How often should a child check in with their immunologist?

### **Research Focus**

Long-term outcomes

Neurodevelopment and school readiness

Health-specific services needed

Transition of care

Family well-being

### Long-term Follow-up Program: A Stakeholder Approach





### California Severe Combined Immunodeficiency Consortium Long-term Follow-up

### Sites:

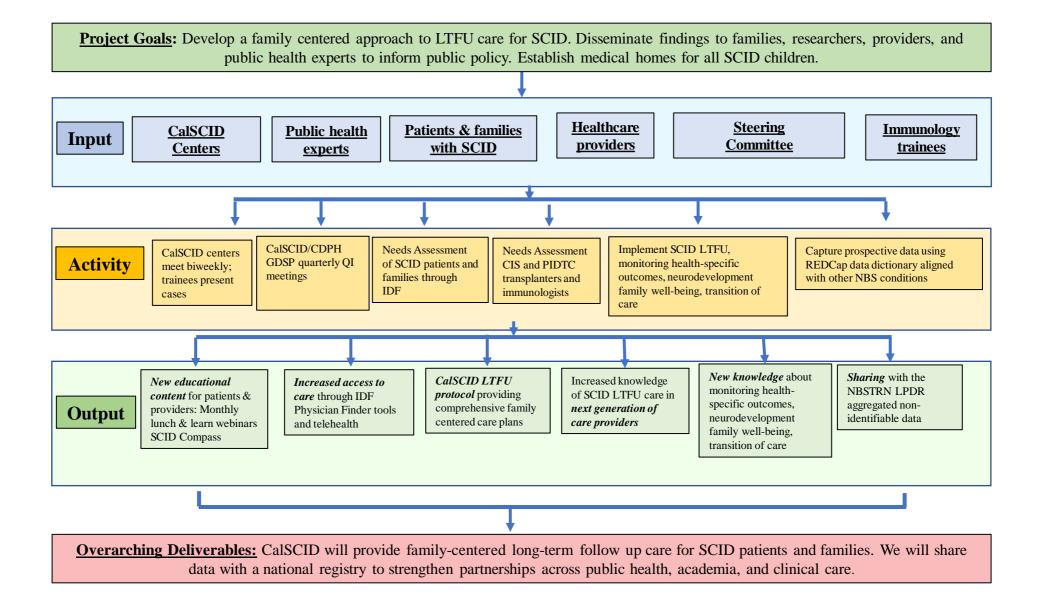
- University of California San Francisco
- University of California Los Angeles
- University of California Davis
- University of California Irvine
- University of California San Diego
- Stanford

### Partners:

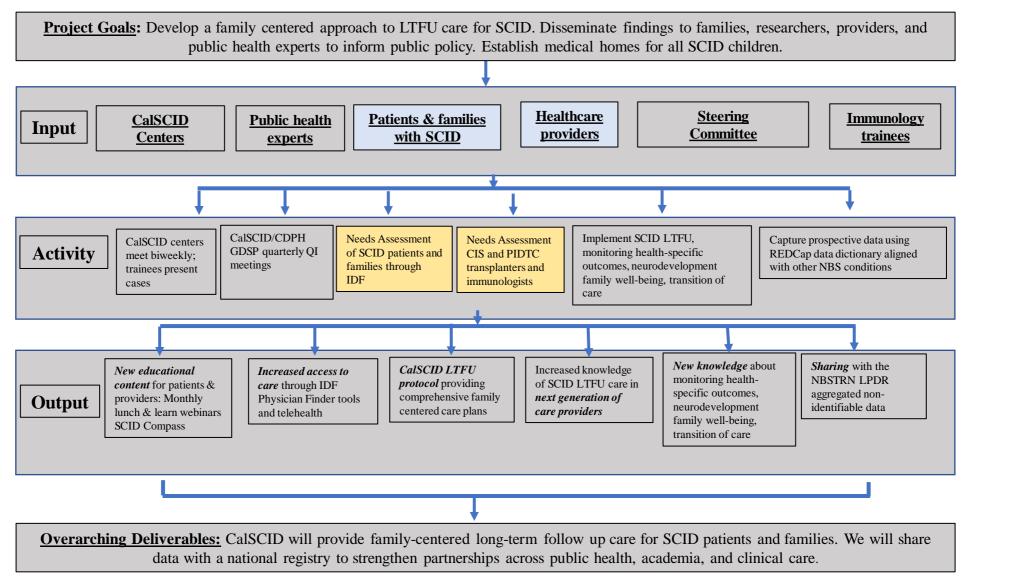
- California Department of Public Health
- Immune Deficiency Foundation
- Primary Immune Deficiency Treatment Consortium
- SCID, Angels for Life
- Newborn Screen Translational Research Network



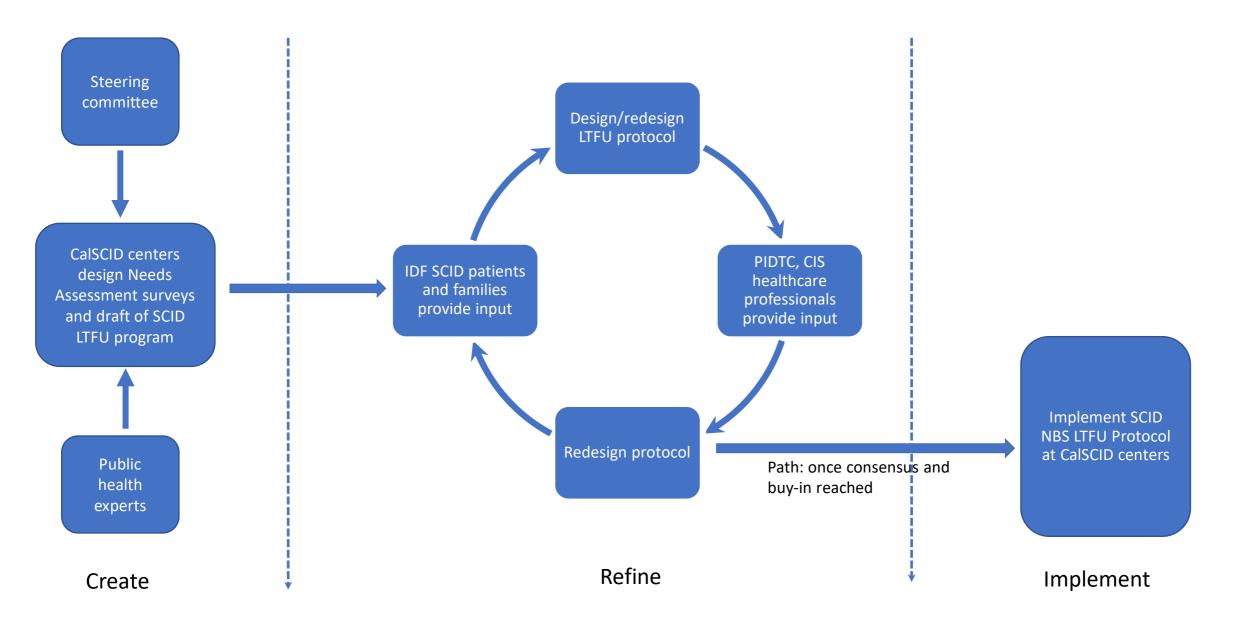
HRSA funded 8



#### Needs Assessment



### **Overview of development of SCID LTFU program**



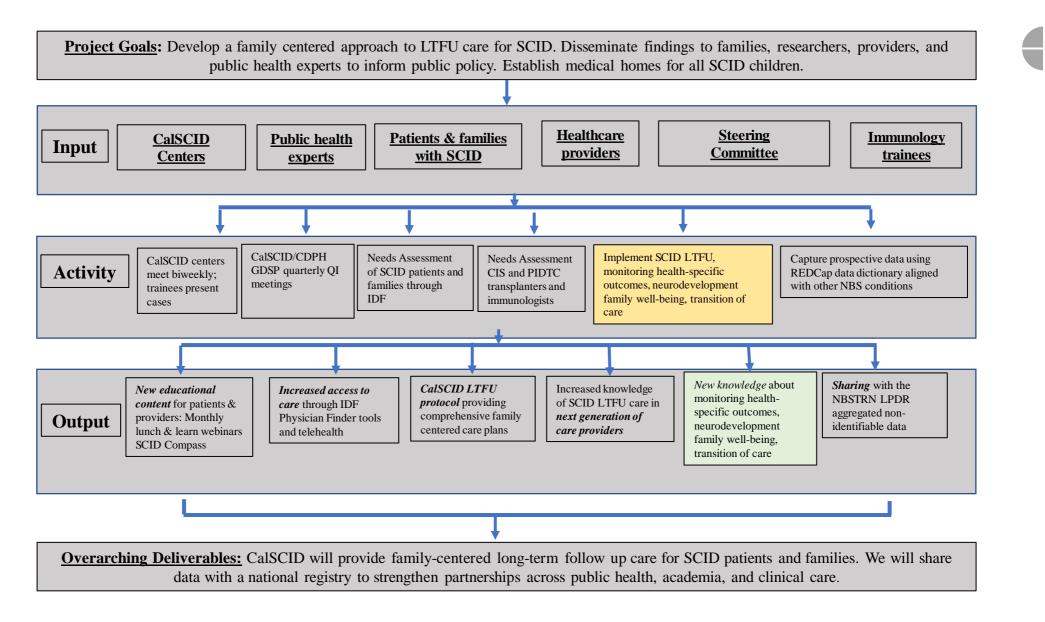
## Patients and Families

## Healthcare Providers

- Demographics
- Information support
- Emotional support
- Financial support
- Development
- Medical Home
- Access to care
- Transition of care

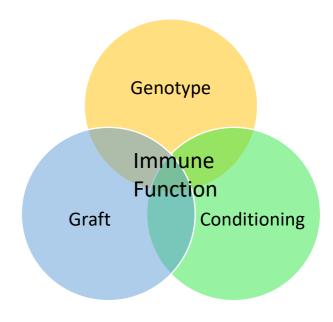
- Demographics
- Current practices
- Medical home
- Transition of care
- Barriers
- Development assessment
- Wellbeing assessment
- Information needs

#### Health-specific Outcomes



## Health-specific Outcomes: Immune Function

- To date, focus has been on survival and not about outcomes beyond survival
- Durability of Immune Reconstitution
- Impact of genotype and on non-immune organ system
- Limitations of transplant on non-hematopoietic immune function
- Frequency and type of immune evaluation



## Health-specific Outcomes: Beyond Immune Reconstitution

- Allergy
- Audiology
- Cardiology
- Dental/oral medicine
- Dermatology
- Endocrinology
- ENT
- Gastroenterology
- General Care
- Genetics
- Hematology/Oncology

- Infectious Disease
- Nephrology
- Neurology
- Nutrition/ Feeding Team
- Ophthalmology
- Pulmonary Medicine
- Psychology
- Psychiatry
- PT/OT
- Social Work
- Surgery
- Rheumatology

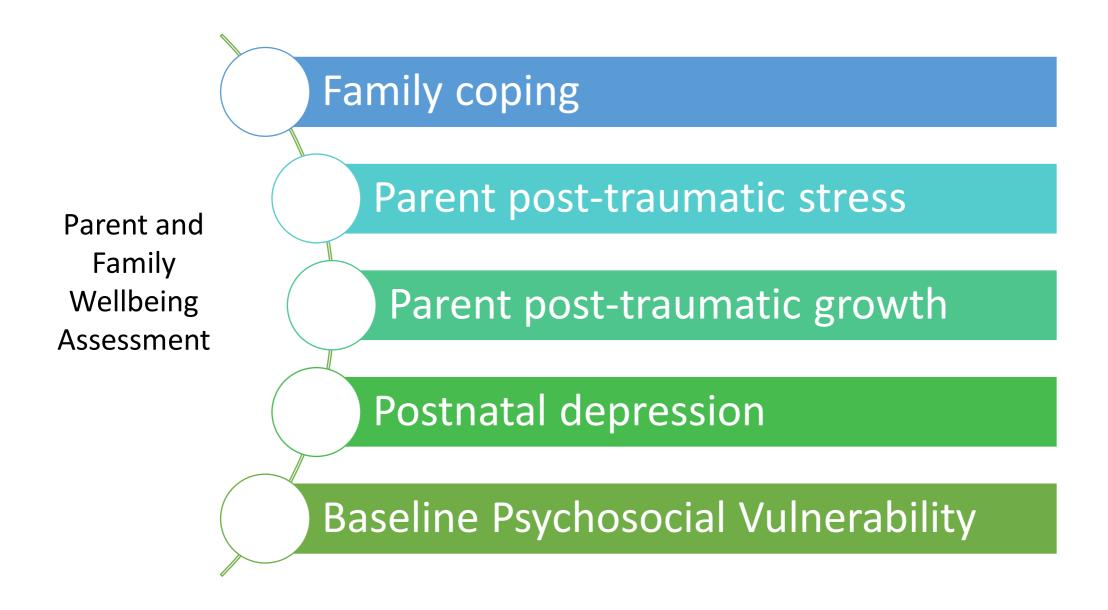
### Health-specific Outcome: Neurodevelopment

- Paucity of literature on outcomes following HCT and the impact on neurocognitive development in different SCID genotypes and conditioning regimens
- Different depending on type of SCID
- Different depending on type of conditioning
- Ideal: Formal assessment of neurodevelopment at 5 years
- School readiness

## Health-specific Outcome: Family Wellbeing

- Understand stressors
- Uncover ways to lessen psychological trauma and promote wellbeing
- Understand vulnerabilities in our healthcare delivery
- Examine resilience







### **Personalized Communication**



#### About me

I was so happy to be pregnant again after a previous miscarriage. It's hard for me to understand how my baby could have SCID because she looks so perfect.. I've read a lot about <u>SCID</u> and I know that my baby is likely to survive but I don't know what the future looks like and if there are cases of babies who don't survive. My faith will help me get through this.

### Melissa

Information Seeking Mother

#### Age: 34

Occupation: Executive Assistant Education: Bachelor's Degree Relationship: Married Children: <u>3 year-old</u> daughter Support: Husband, and mother-in law

"...we didn't <u>actually find</u> out how long we might be here until [later in the hospitalization]...I think that was <u>pretty tough</u>. I think doctors...don't want to deliver kind of blow by blow, but—I think it's harder to find out later than to know upfront."

#### **Currently I feel....**

Overwhelmed, guilty, isolated, sad

#### Goals

Wants family to be healthy and happy Wants to raise kids that have the best opportunity Wants to be more environmentally conscious

#### How to communicate with me

- ✓ Give me straight answers
- ✓ Give me details
- Provide interactive educational materials
- ✓ Use images to illustrate information
- ✓ Clearly describe what to anticipate week-by-week

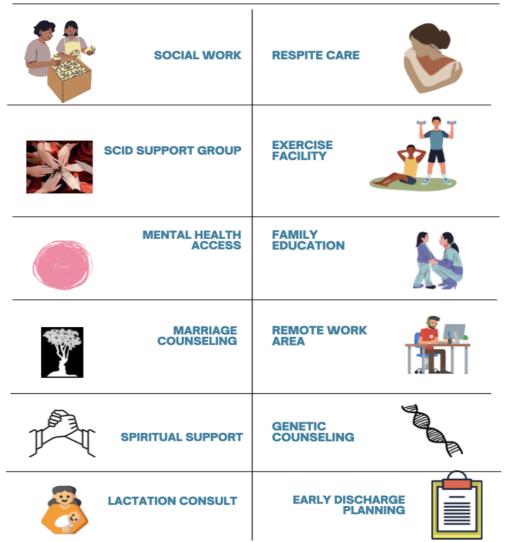
#### How I get information

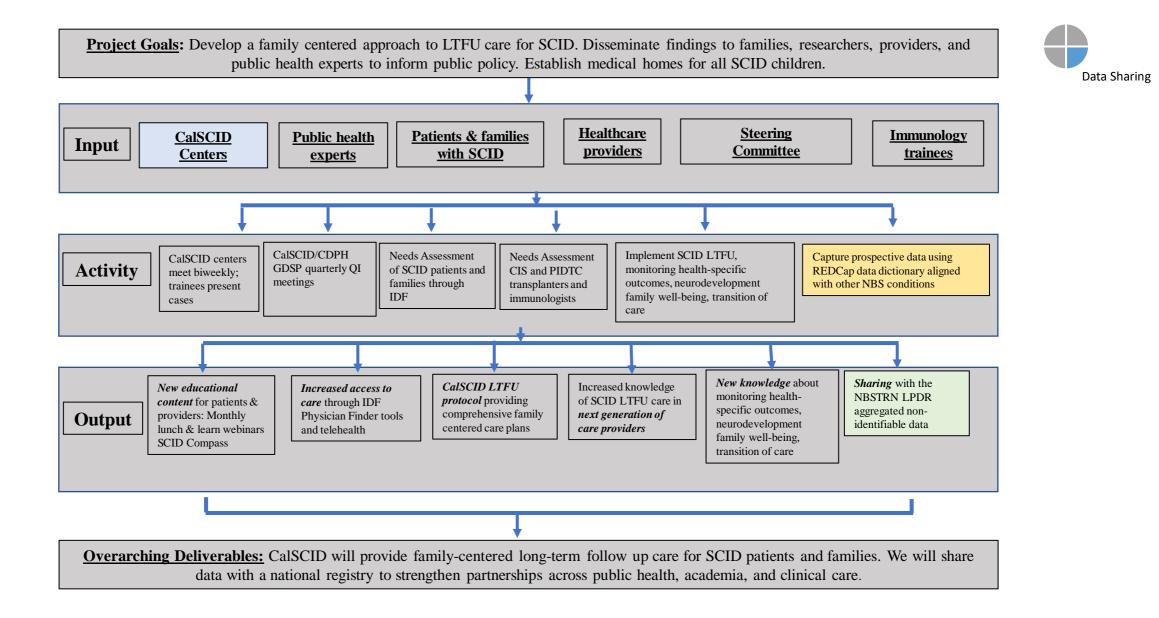


#### Habits

-Exercises regularly -Date nights with husband -Follows fitness and foodie influencers -Regularly posts on Instagram of children -Online shopping

### **NEW PATIENT TOOLKIT**





## Data sharing through LPDR

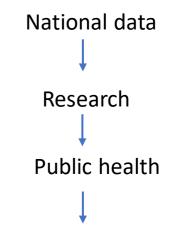




Longitudinal Pediatric Data Resource translates new discoveries into clinical practice.

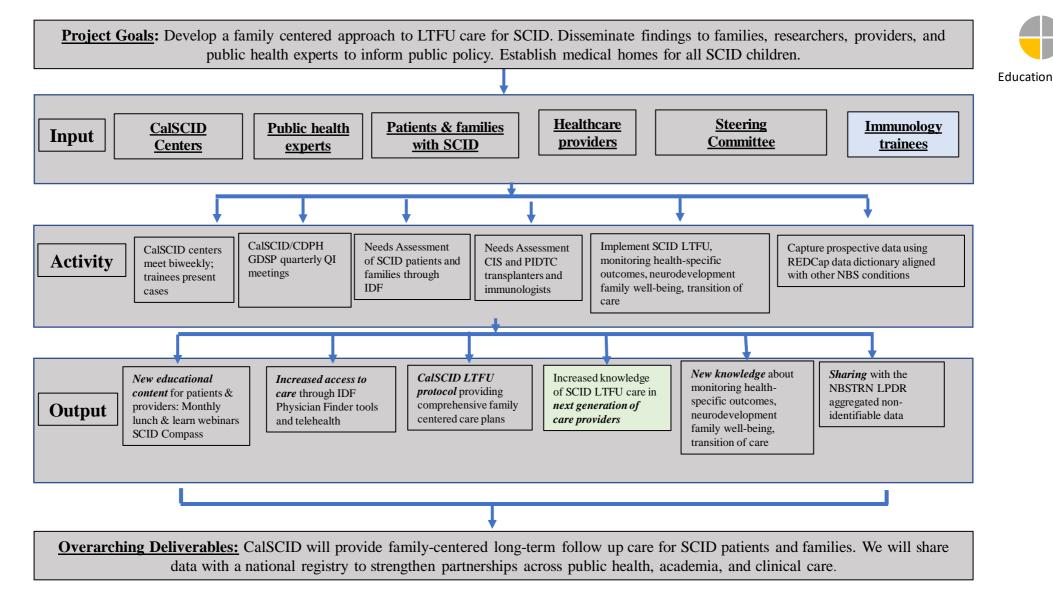
**Offers:** Suite of information technology tools to support newborn screening researchers.

**Requires:** Prospective collection, aggregation and sharing of health information



Healthcare quality

### Development



. . . . . . . . . .

## Educate the Next Generation of Immunologists



- Current shortage of knowledgeable providers
- We need providers who are familiar with SCID
- Any individual with SCID should be able to identify a medical home

## Conclusions

- Provide SCID-specific care throughout the lifespan of patients
- Inform future research
- Influence public policy
- We want to take better care of our patients











### Patients and Families





Deficiency Foundation Linda Franck Jennifer Puck Mort Cowan Xin-Hua Chen Kathy Nguyen Emily Stekol

Kelsey Ige

Manish Butte

Victoria Dimitriades

David Buchbinder

Cathy Collins

Ami Shah

Heather Smith

Amy Brower

Alissa Creamer

**Emma Mertens** 

Stan Sciortino

UCI

UC San Diego









