

Public Meeting on Patient-Focused Drug Development for Vitiligo

Monday, March 8, 2021

FDA will be streaming a live webcast of the meeting with the presentation slides, which is open to the public at: https://fda.yorkcast.com/webcast/Play/46a8899c50914665b27d134db530bd421d. The webcast recording and presentation slides, along with a meeting transcript and summary report, will also be made publicly available after the meeting.





Welcome

Robyn Bent, RN, MS | CAPT, U.S. Public Health Service

Director, Patient-Focused Drug Development Program
Office of Center Director
Center for Drug Evaluation and Research
U.S. Food and Drug Administration



Agenda

- Opening Remarks
- Setting the Context
 - Overview of FDA's Patient-Focused Drug Development Initiative
 - Overview of Vitiligo
 - Overview of Discussion Format
- Discussion Topic 1: Health Effects and Daily Impacts
- Break
- Discussion Topic 2: Current Approaches to Treatment
- Closing Remarks



Opening Remarks

Kendall Marcus, MD

Director
Division of Dermatology and Dentistry
U.S. Food and Drug Administration



Overview of FDA's Patient-Focused Drug Development Initiative

Theresa Mullin, PhD

Associate Director for Strategic Initiatives Center for Drug Evaluation and Research U.S. Food and Drug Administration

What is Patient-Focused Drug Development (PFDD)?





¹https://www.fda.gov/drugs/development-approval-process-drugs/patient-focused-drug-development-glossary



Value of FDA's PFDD Meetings

- Patients are uniquely positioned to inform FDA understanding of the clinical context for drug review and regulatory decision making
- Prior to PFDD, available mechanisms for obtaining patient input were limited to discussions related to specific applications under review, such as Advisory Committee meetings and only a few patient representatives
- PFDD meetings provide a more systematic way to obtain patients' perspectives on severity of a condition, and its impact on daily life, and their assessments of available treatment options



PFDD Meetings Provide Key Stakeholders an Opportunity to Hear the Patient's Voice

The PFDD initiative was **established** by FDA.

2013 - 2017

FDA recognizes the value of gathering patient input through PFDD meetings and continues to host disease-specific PFDD meetings.





2012

FDA conducted **24 disease- specific PFDD meetings.**

2017 - Present

CY2014 CY2013 CY2015 Sickle Cell Disease · Breast Cancer Chronic Fatigue Syndrome/ Myalgic Encephalomyelitis Fibromyalgia · Chagas Disease Pulmonary Arterial Hypertension Functional Gastrointestinal Disorders

CY2016

Lung Cancer

Narcolepsy

Psoriasis

HIV

- Neuropathic Pain Associated with Peripheral Neuropathy
- Patients Who Have Received an Organ Transplant

- CY2017
- Sarcopenia
- Autism
- Alopecia Areata
- Hereditary Angioedema*

Inborn Errors of Metabolism

· Hemophilia A, B, and Other Heritable Bleeding Disorders*

Female Sexual Dysfunction

Idiopathic Pulmonary Fibrosis

- CY2018
- Opioid Use Disorder

Non-tuberculous

• Parkinson's Disease and Huntington's Disease

Alpha-1 Antitrypsin Deficiency*

Mycobacterial Lung Infections

• Chronic Pain

CY2019

None

CY2020

- Systemic Sclerosis
- Stimulant Use Disorder

CY2021

Vitiligo

In addition, FDA clinical and statistical review staff have also attended over 40 other Externally-Led PFDD meetings to date, conducted by patient advocacy groups



Patients' Perspectives Inform FDA work in oversight of medical product development and evaluation

FDA's mission is to protect and promote public health by evaluating the safety and effectiveness of new drugs.

While FDA plays a critical role in drug development, it is just one part of the process. FDA does not develop drugs nor conduct clinical trials.

Review divisions at FDA (e.g., Division of Neurology, Division of Psychiatry, etc.) provide regulatory oversight during drug development, make decisions regarding marketing approval for new drugs, and provide guidance to regulated industry on clinical, scientific and regulatory matters.



PFDD meetings follow a town hall style discussion format



Overview

Clinical Background and Current Available Treatments



Symptoms and Daily Impacts

- Panel of patients and caregivers
- Facilitated group discussion



- Panel of patients and caregivers
- Facilitated group discussion



Each PFDD meeting is tailored to the needs of the specific disease area

- FDA encourages patient advocates, researchers, drug developers, healthcare providers and other government officials to attend PFDD meetings
- However, our focus is on hearing directly from patients and their caregivers, so we ask that others remain silent in listening mode during the discussions since the meetings are a platform to hear directly from patients, caregivers and patient representatives.
- After the PFDD meeting, a Voice of the Patient report summarizes the input shared by patients and caregivers.



Resources are available on PFDD webpages

CDER Patient-Focused Drug Development Homepage

- Guidances
- COA Grant Program
- FDA-led PFDD Meetings
- Externally-led PFDD Meetings
- External Resources

- Browse upcoming meetings
- View past meeting materials
 - Slides, meeting recordings, transcript, agenda, summary report

Questions? Email PatientFocused@fda.hhs.gov.

To get updates about CDER's Patient-Focused Drug
Development programs, subscribe to our <u>free email</u>
<u>subscription service</u> by clicking on the button near the top of
the **homepage**.



Thank you!



An Overview of Vitiligo

Brenda Carr, MD

Medical Officer
Division of Dermatology and Dentistry
U.S. Food and Drug Administration



Overview of Talk

- Introduction
- Epidemiology
- Clinical Features
- Treatment
- Impact of Vitiligo



Introduction

- Vitiligo is an acquired disorder of pigment loss.
- Lesions are white patches with sharp margins.
- Vitiligo results from destruction of melanocytes.
 - Proposed theories include autoimmunity, genetics, oxidative stress, neural hypothesis.¹



Epidemiology

- Estimated prevalence is ~ 1% of the worldwide population²
- Nearly 50% have onset before age of 20 years³
 - Onset < 12 years old is common⁴
- Affects males and females equally³

²Whitton et al. Evidence-based management of vitiligo: summary of a Cochrane systematic review. Br J Dermatol 2016;174:962–969.

³Ezzedine et al. Vitiligo. Lancet 2015;386:74-84.

⁴Nicolaidou et al. Childhood- and later-onset vitiligo have diverse epidemiologic and clinical characteristics. J Am Acad Dermatol 2012;66:954-8.



Clinical Features

- Two major types:
 - *Non-segmental*: bilateral, symmetrical, unpredictable; most common; subtypes include localized, acrofacial, generalized, universal
 - Segmental: unilateral, stable
- Hair in affected areas may be depigmented
- Mucosa may be involved





Acrofacial

Rodrigues et al. New discoveries in the pathogenesis and classification of vitiligo. J Am Acad Dermatol 2017;77:1-13.





Generalized

Taieb A and Picardo M. Vitiligo. N Engl J Med 2009;360:160-9.





Generalized

Ezzedine et al. Vitiligo. Lancet 2015;386:74–84.





Universal

Rodrigues et al. New discoveries in the pathogenesis and classification of vitiligo. J Am Acad Dermatol 2017;77:1-13.





Segmental

Ezzedine et al. Vitiligo. Lancet 2015;386:74–84.



Treatment

- FDA-approved therapy: Monobenzone Cream (no longer marketed)
 - "Indicated for final depigmentation in extensive vitiligo"



Topical

- Corticosteroids
- Calcineurin inhibitors
- Vitamin D analogs



Phototherapy

- Ultraviolet B (UVB):
 - Narrowband (NB-UVB)
 - Monochromatic excimer light (lasers, lamps)
- Psoralen plus ultraviolet A light (PUVA) photochemotherapy
 - topical or oral



Systemic

- Oral corticosteroids
- Limited information for other immunosuppressants⁵

⁵Rodrigues et al. Current and emerging treatments for vitiligo. J Am Acad Dermatol 2017;77:17-29.



Surgical

- Tissue grafts^{5,6}:
 - Punch
 - Suction blister
- Cellular grafts⁵:
 - Noncultured epidermal suspension
 - Cultured melanocytes

⁶Iannella et al. Vitiligo: Pathogenesis, clinical variants and treatment approaches. Autoimmunity Reviews 2016;15:335–343.



Camouflage

- Makeup
- Tattoos
- Self-tanning products



Other Measures

- Diet and supplements⁷
 - Investigation of possible adjunctive role for vitamins, minerals, botanicals

⁷Grimes PE and Nashawati R. The Role of Diet and Supplements in Vitiligo Management. Dermatol Clin 35 (2017) 235–243.



Impact of Vitiligo

- Vitiligo may significantly impact patients' psychosocial wellness.
 - "disempowerment and loss of self-esteem...a profound diminution" in the quality of life⁸
 - "worry, anger, shame and depression"; impaired social life9
- Economic

⁸Talsania et al. Vitiligo is more than skin deep: a survey of members of the Vitiligo Society. Clinical and Experimental Dermatology, 35, 736–739.

⁹Sampogna et al. Identification of categories at risk for high quality of life impairment in patients with vitiligo. Br J Dermatol 2008,59: 351–359.



Patient-Focused Drug Development

- The FDA is aware of unmet medical needs experienced by patients who have vitiligo.
- The FDA is conducting this public meeting to hear comments about the impact of vitiligo on patients, caregivers and family members.
- Thank you for taking the time to join us to share your experiences and unique perspectives.



Overview of Discussion Format

Robyn Bent, RN, MS | CAPT, U.S. Public Health Service

Director, Patient-Focused Drug Development Program
Office of Center Director
Center for Drug Evaluation and Research
U.S. Food and Drug Administration



Discussion Overview

Topic 1: Health Effects and Daily Impacts That Matter Most to Patients

- Health effects of vitiligo that have the most significant impact on your daily life
- How your vitiligo has changed over time
- What worries you most about your vitiligo

Topic 2: Current Approaches to Treatment

- Your experience with treating your vitiligo
- What approaches you use to treat your vitiligo
- What you have found to be most effective in helping you treat your vitiligo
- What factors you would consider when considering or seeking treatment



Discussion Format, continued

You will have a chance to answer polling questions

- Their purpose is to aid our discussion
- Participants can use the mentimeter.com link to answer polling questions
- Individuals or family members only, please

Participants can add comments through the webcast or by telephone

 Although they may not all be read or summarized today, your comments will be incorporated into our summary report



Send us your comments!

You can send us comments through the "public docket"

- The docket will be open until May 10, 2021
- Comments will be incorporated into our summary report
- Anyone is welcome to comment

Visit:

https://www.regulations.gov/docu ment?D=FDA-2020-N-0255-0054

Or Search "patient-focused vitiligo" on www.regulations.gov

And Click Comment Now!





Participate in crowdsourcing!

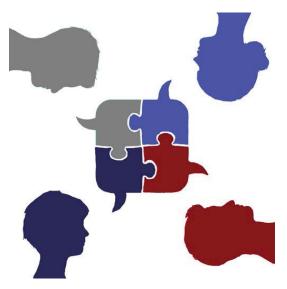
 Crowdsourcing is another way for the vitiligo community to engage and interact with each other and the FDA.

In addition to the docket, you can also send us comments through Crowdsourcing

Comments will be incorporated into our summary report

Anonymous Participation: There will be instructions on how to participate anonymously once you log in.

How do I join? We will send out an email with instructions and the link to the crowdsourcing site in a couple of days.





Discussion Ground Rules

- We encourage all individuals and family members to contribute to the dialogue
- FDA is here to listen
- Discussion will focus on vitiligo health effects and treatment
- The views expressed today are personal opinions
- Respect for one another is paramount

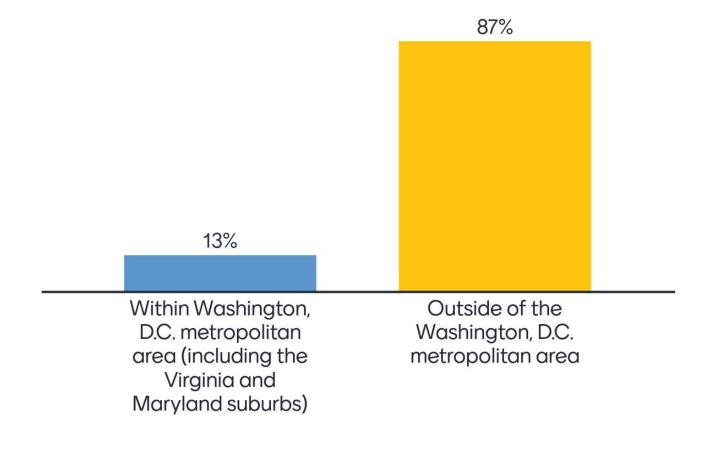


Where do you live?

- a. Within Washington, D.C.
 metropolitan area
 (including the Virginia and Maryland suburbs)
- b. Outside of the Washington, D.C. metropolitan area

Where do you live?







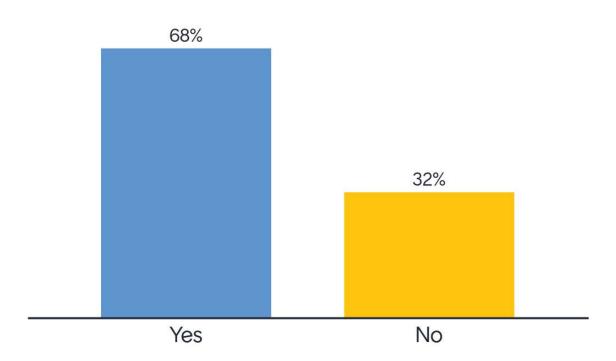


Have you or your loved one ever been diagnosed as having vitiligo?

- a. Yes
- b. No

Have you ever been diagnosed as having vitiligo?







We will ask that the remainder of the questions be answered by people who responded "yes" to Question 2. Please answer for the person diagnosed with vitiligo.

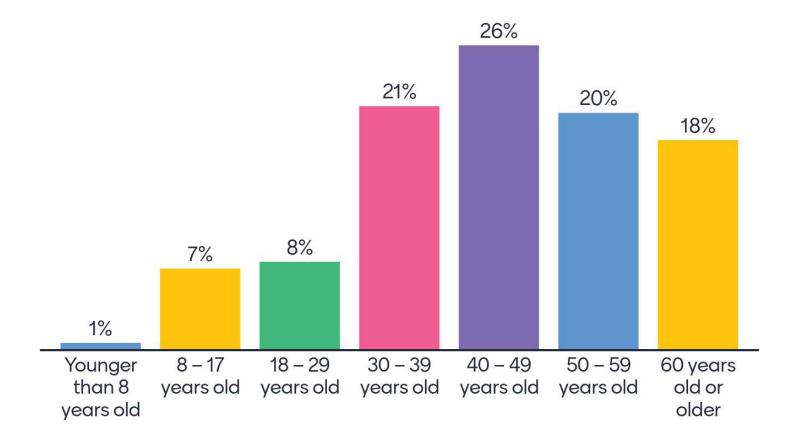


What is you/your loved one's age?

- a. Younger than 8 years old
- b. 8 17 years old
- c. 18 29 years old
- d. 30 39 years old
- e. 40 49 years old
- f. 50 59 years old
- g. 60 years old or older

What is your age?







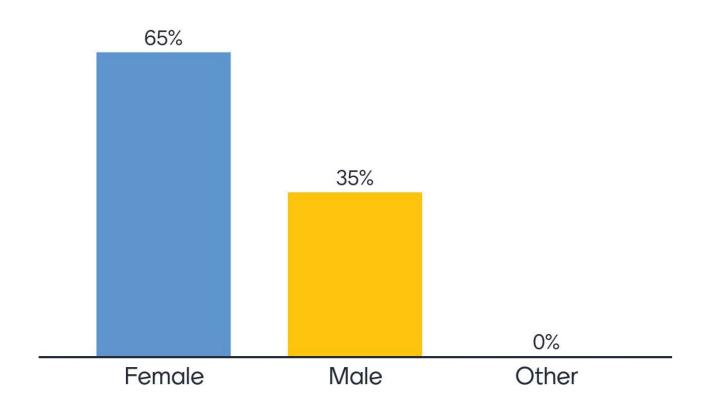


Do you/your loved one identify as:

- a. Female
- b. Male
- c. Other

Do you identify as:







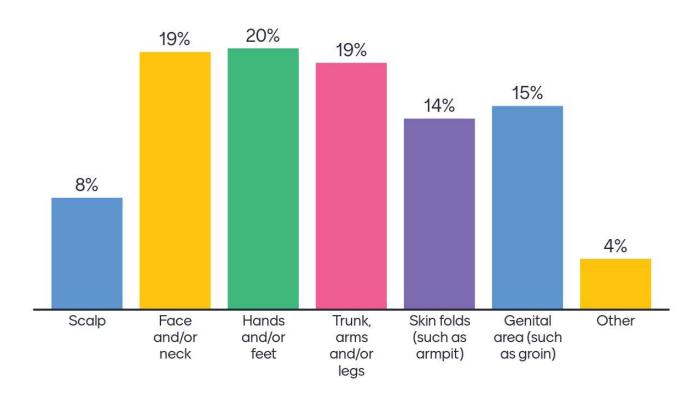


Where is your vitiligo located? **Check all that apply.**

- a. Scalp
- b. Face and/or neck
- c. Hands and/or feet
- d. Trunk, arms and/or legs
- e. Skin folds (such as armpit)
- f. Genital area (such as groin)
- g. Other areas not mentioned

Where is your vitiligo located? Select all that apply.







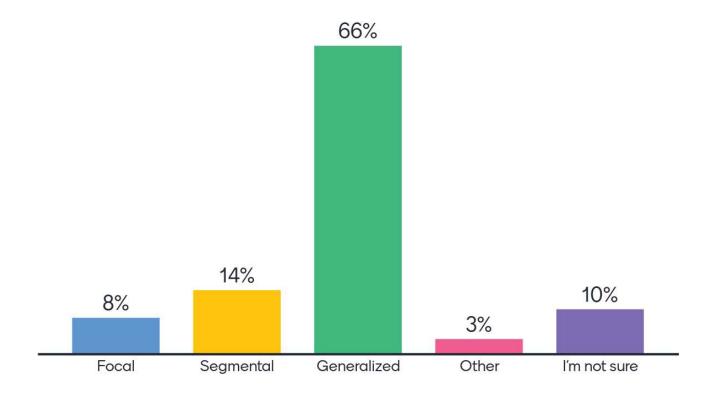


In what pattern does your vitiligo appear?

- a. Focal
- b. Segmental
- c. Generalized
- d. Other
- e. I'm not sure

In what pattern does your vitiligo appear?









Discussion Topic 1 Health Effects and Daily Impacts of Vitiligo



Topic 1 Discussion Questions

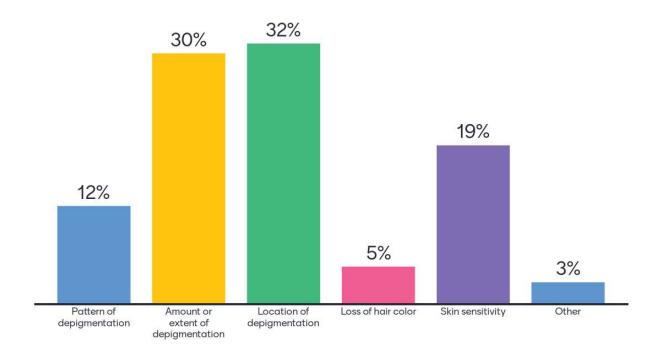
- 1. Which **aspects** of vitiligo have the most significant impact on your life? (Examples may include depigmentation, itching, sensitivity to sunlight, etc.)
- 2. Are there **specific activities** that are important to you but that you cannot do at all or as fully as you would like because of your vitiligo? (Examples of activities may include participating in social events, sports, being outside in the sunlight, etc.)
 - a. How does your vitiligo and its impacts affect your daily life on the best days? On the worst days?
- 3. How has your vitiligo **changed over time**?
 - a. How has your vitiligo changed from childhood to adulthood (such as vitiligo severity, disease acceptance)?
 - b. Would you define your vitiligo today as being well-managed?
- 4. What worries you most about your vitiligo?
 - a. Is there a particular body area affected by vitiligo (such as face, body) that is of most concern to you?

What aspects of your vitiligo are most bothersome to you? Please choose up to three answers.

- a. Pattern of depigmentation
- b. Amount or extent of depigmentation
- c. Location of depigmentation
- d. Loss of hair color
- e. Skin sensitivity
- f. Other effects not mentioned

What aspects of your vitiligo are most bothersome to you? Please choose up to three answers.







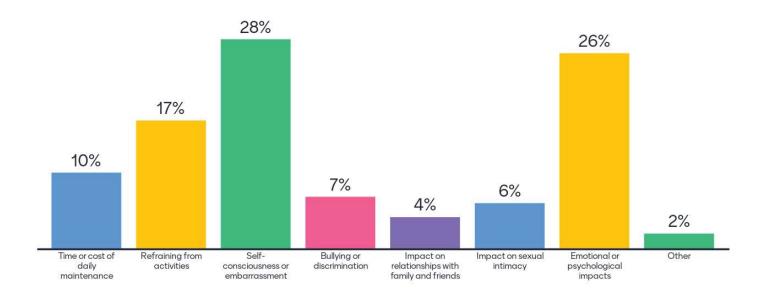


What do you find to be the most bothersome impacts of vitiligo on your daily life? Please choose up to three answers.

- a. Time or cost of daily maintenance
- b. Refraining from activities
- c. Self-consciousness or embarrassment
- d. Bullying or discrimination
- e. Impact on relationships with family and friends
- f. Impact on sexual intimacy
- g. Emotional or psychological impacts
- Other impacts not mentioned

What do you find to be the most bothersome impacts of vitiligo on your daily life? Please choose up to three answers.









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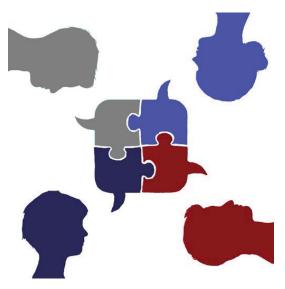
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Discussion Topic 2 Current Approaches to Treatment



Topic 2 Discussion Questions

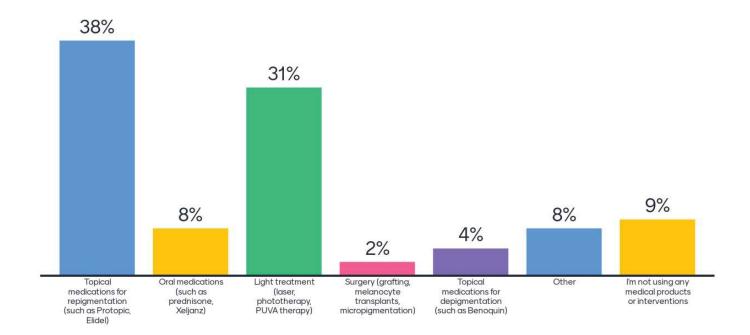
- What are you currently doing to help treat your vitiligo? (Examples may include prescription medicines, over-the-counter products, and other therapies including non-drug therapies such as diet modification.)
 - a. How has your treatment regimen changed over time, and why?
- 2. How well does your current treatment regimen treat the most significant aspects of your vitiligo? For example, how well do your treatments improve your ability to do specific activities?
- 3. What are the most significant **downsides to your current treatments**, and how do they affect your daily life? (Examples of downsides may include bothersome side effects, depigmentation of affected area is more noticeable, going to the hospital for treatment, etc.)
- 4. Assuming there is no complete cure for your vitiligo, what specific things would you look for in an **ideal treatment** for your vitiligo?
 - a. Is there a particular body area affected by vitiligo (such as face, body) that you would prioritize for treatment?
- 5. What factors do you consider when making decisions about selecting a course of treatment?

Have you <u>ever</u> used any of the following medical products (drug therapies or medical devices) or interventions to treat your vitiligo? **Check all that apply.**

- Topical medications for repigmentation (such as Protopic, Elidel)
- b. Oral medications (such as prednisone, Xeljanz)
- Light treatment (laser, phototherapy, PUVA therapy)
- Surgery (grafting, melanocyte transplants, micropigmentation)
- e. Topical medications for depigmentation (such as Benoquin)
- f. Other medical products or interventions not mentioned
- g. I'm not using any medical products or interventions

Have you ever used any of the following medical products or interventions to treat your vitiligo? Check all that apply.







Besides the medical products or interventions mentioned previously, what else are you doing to manage your vitiligo? Check all that apply.

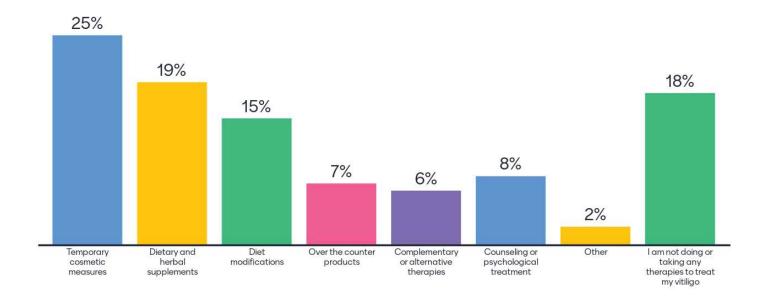
- a. Temporary cosmetic measures
- b. Dietary and herbal supplements
- c. Diet modifications
- d. Over the counter products
- e. Complementary or alternative therapies
- f. Counseling or psychological treatment
- g. Other therapies not mentioned
- h. I am not doing or taking any therapies to treat my vitiligo

Participation in the polling questions is voluntary. The results are used as a discussion aid only and should not be considered scientific data.

FD

Besides the medical products or interventions mentioned previously, what else are you doing to manage your vitiligo? Check all that apply.







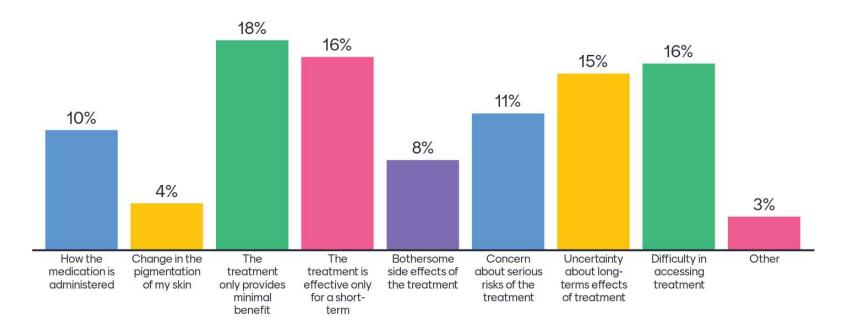


For the medical products or interventions you use, what do you consider to be the <u>most burdensome</u> <u>impacts</u>? **Please choose up to three answers.**

- a. How the medication is administered
- b. Change in the pigmentation of my skin
- c. The treatment only provides minimal benefit
- d. The treatment is effective only for a short-term
- e. Bothersome side effects of the treatment
- Concern about serious risks of the treatment
- g. Uncertainty about long-terms effects of treatment
- h. Difficulty in accessing treatment
- i. Other negative impacts not mentioned

For the medical products or interventions you use, what do you consider to be the most burdensome impacts? Please choose up to three answers.









Imagine that a new topical cream (not a steroid) indicated to treat vitiligo has recently been approved by FDA. Your doctor believes that you/your loved one may be a good candidate for this medication.

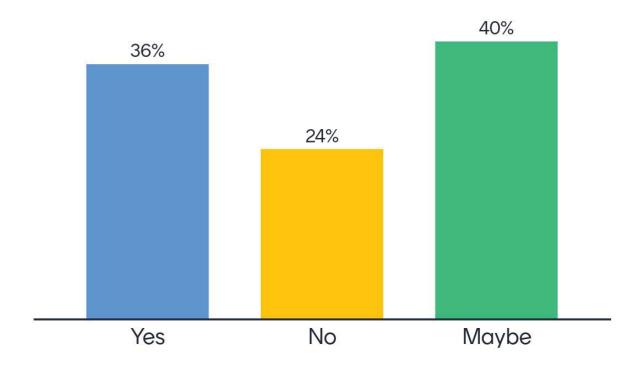
The topical cream needs to be applied once a day. Research in animals and people show that this treatment may improve pigmentation by up to 50% in some people. More common side effects of this therapy may include redness and irritation at the application site, mild acne, and burning. Rarer but more serious side effects may include fever, pain during swallowing, insomnia, nausea, and increased heart rate.

Given the risks and benefits, would you take this medication?

- a. Yes
- b. No
- c. Maybe

Given the risks and benefits, would you take this medication?







Imagine that you have been invited to participate in a clinical trial to study an experimental treatment for vitiligo. Your doctor believes that you may be a good candidate for this clinical trial.

This experimental treatment is an oral immunosuppressant. Early research in animals and people show that this treatment may improve pigmentation by up to 50% in some people after 1 year. The purpose of this study is to better understand how well this treatment works and its safety.

More common side effects of this therapy may include headache, diarrhea, and pain in the sinuses (such as nose, forehead, cheeks). Rarer but more serious side effects may include stomach/abdominal pain, liver problems, or cancer. This clinical study will last 18 months and clinic visits will occur every 3 months. Visits will involve routine blood work.

Based only on the information presented in the scenario, would you consider participating in this clinical trial? Please choose one response.

- a. Yes, I would consider participating in this study
- b. No, I would not consider participating in this study
- c. I'm not sure



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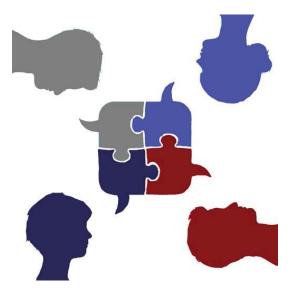
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