

# Telehealth Assessment of Tardive Dyskinesia



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# Objectives

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- ▶ Review Tardive Dyskinesia (TD), incidence, and prevalence
- ▶ Compare patient and provider perspectives on telehealth
- ▶ Consider the various models of telehealth
- ▶ Review recommendations for assessing TD via audio-only and audio-visual telehealth

# Tardive Dyskinesia (TD) Overview

- ▶ TD is defined as involuntary athetoid or choreiform movements (lasting at least a few weeks) generally of the tongue, lower face and jaw, and extremities (but sometimes the pharyngeal, diaphragmatic, or trunk muscles), developing in association with the use of a DRBA for at least a few months<sup>1</sup>
- ▶ Timing of DRBA use can help determine if patients have TD<sup>1</sup>
- ▶ Neuroleptic withdrawal-emergent dyskinesia occurs when abnormal movement develops shortly after discontinuation, or after change or reduction in dosage of neuroleptic medications<sup>1</sup>
- ▶ Dyskinesia that persists 4-8 weeks after DRBA discontinuation is considered TD<sup>1</sup>

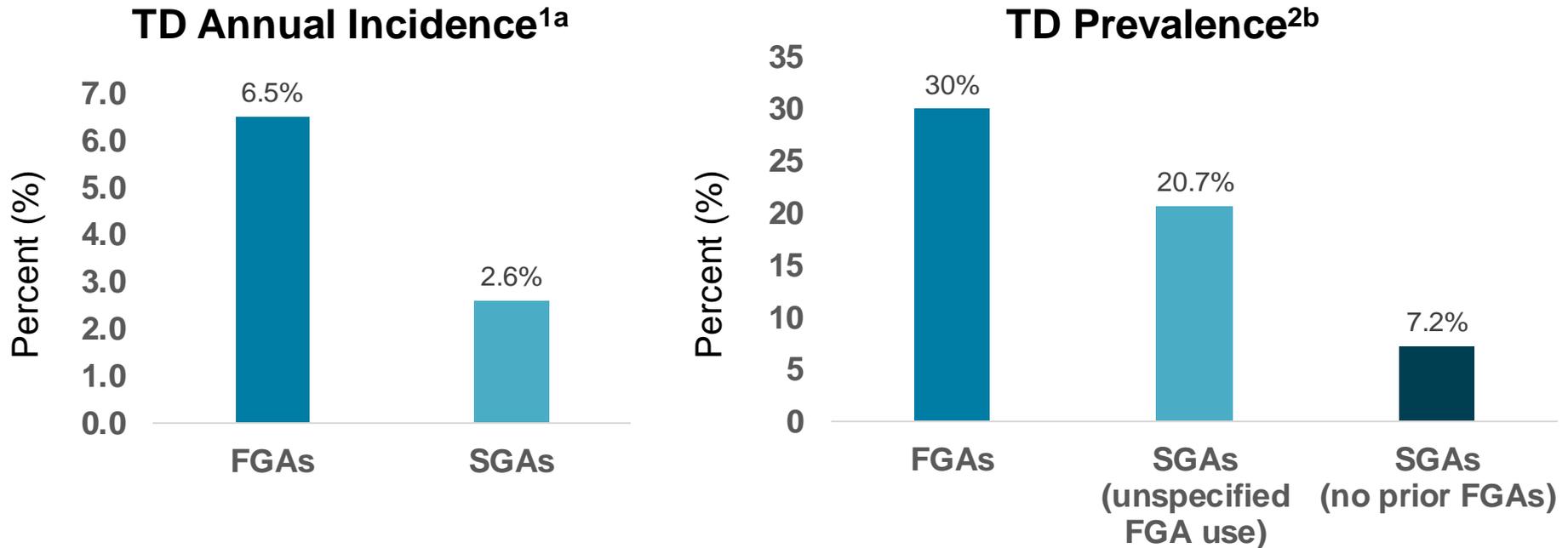
DRBAs are used to manage<sup>2</sup>:

- Psychiatric disorders
  - Psychosis
  - Depression
  - Bipolar Disorder
- Gastrointestinal problems

DRBA, dopamine receptor blocking agent

1. American Psychiatric Association: *Diagnostic and Statistical Manual of Mental Disorders*. Fifth Edition. American Psychiatric Association: Washington, DC; 2013. 2. Fahn S. *Principles and Practice of Movement Disorders*. 2nd ed. New York, New York: Saunders; 2011.

# TD Is Associated With Prolonged DRBA Treatment



Approximately 5 million patients in the United States are treated with antipsychotics<sup>3</sup>

≥500,000 patients may have TD<sup>3,4,c</sup>

<sup>a</sup>2018 meta-analysis of 57 randomized controlled trials (FGA-SGA studies, N=10,706; SGA-SGA studies, N=9,153). <sup>b</sup>2017 meta-analysis of 41 studies (N=11,493).

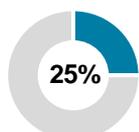
<sup>c</sup>Estimate from a 2014 analysis of prescriptions and incidence rates.

DRBA, dopamine receptor blocking agent; FGAs, first-generation antipsychotics; SGAs, second-generation antipsychotics

1. Carbon M, et al. World Psychiatry. 2018;17(3):330-340. 2. Carbon M, et al. J Clin Psychiatry. 2017;78(3):e264-e278. 3. Cloud LJ, et al. Neurotherapeutics. 2014;11:166-176. 4. Data on file. Neurocrine Biosciences.

# Patient Perspectives on Telehealth

- ▶ Telehealth has been studied in recent years in a variety of settings including outpatient clinics<sup>1</sup>, primary care<sup>2</sup>, and mental health care<sup>3</sup>
- ▶ U.S. consumer surveys have monitored patient experiences with telehealth since the start of the COVID-19 pandemic<sup>4,5</sup>



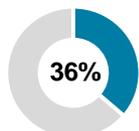
Patients that had used telehealth prior to COVID-19 (n=500)<sup>5</sup>



Patients that reported that they are more likely to use telehealth services now than before COVID-19 (n=500)<sup>5</sup>



Patients that were 'very satisfied' with the quality of care they received from telehealth (n=1734)<sup>1</sup>



Patients that would consider switching from their current physician to one who offered telehealth services (n=500)<sup>5</sup>

- ▶ Patients are comfortable using telehealth for mental health care<sup>2,3</sup>
  - 79% of rural patients and 70% of urban patients rated themselves as “moderately” to “extremely” comfortable with telepsychiatry from home for mental health care<sup>2,a</sup>

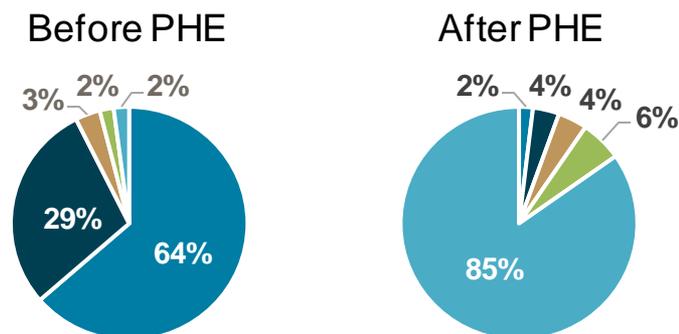
<sup>a</sup> Ns for responses to survey questions range from 107 to 108 for the rural sample, and 70 to 76 for the urban sample

1. Polinski JM, et al. Patients' satisfaction with and preference for telehealth visits. *J Gen Intern Med.* 2015; 31(3):269-75. 2. Grubaugh AL, et al. Attitudes toward medical and mental health care delivered via telehealth applications among rural and urban primary care patients. *J Nerv Ment Dis.* 2008;196(2):166-170. 3. Choi NG, Hegel MT, Marti N, et al. Telehealth problem-solving therapy for depressed low-income homebound older adults: acceptance and preliminary efficacy. *Am J Geriatr Psychiatry.* 2014;22(3):263-271. 4. Bestsennyy O, et al. Telehealth: A quarter-trillion-dollar post-COVID-19 reality? McKinsey & Company. Published May 20, 2020. Accessed July 21, 2020. 5. Sage Growth/Blackbook Research. COVID-19 Market Pulse: U.S. Healthcare Needs and Attitudes in the Age of COVID-19. Published March 27, 2020. Accessed July 21, 2020.

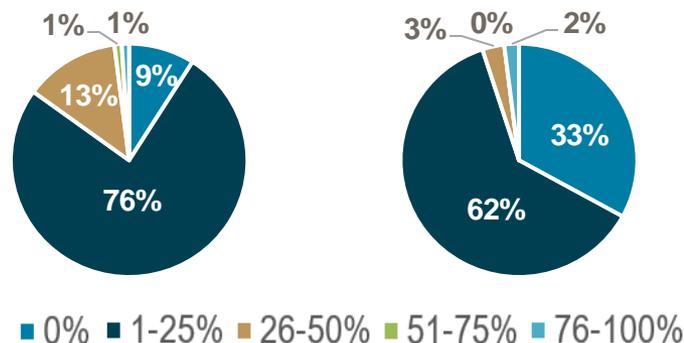
# Provider Perspectives on Telehealth

- ▶ Similar to patients, providers are embracing telehealth in their practices to ensure continuity of care during the COVID-19 pandemic
  - 85% of providers (n=571) reported that since the public health emergency (PHE) was declared, 75-100% of their patients are now using telehealth<sup>1</sup>
  - Compared to before COVID-19, 57% of providers (n=538) are more comfortable using telehealth and 64% view telehealth more favorably now<sup>2</sup>
  - Providers (n=571) report a decrease in patient no-show percentage when seeing patients via telehealth since the public health emergency (PHE) was declared compared to in-person visits prior to COVID-19<sup>1</sup>

HCP-reported proportion of patients using telehealth<sup>1,a</sup> (n=571)



HCP-reported patient no-show percentage<sup>2,b</sup> (n=571)



■ 0% ■ 1-25% ■ 26-50% ■ 51-75% ■ 76-100%

<sup>a</sup> Question asked to APA members: "What percentage of your total patient population were you seeing via telehealth [before PHE] or [after PHE was declared]?"

<sup>b</sup> Question asked to APA members: "Patient no-show percentage when seeing patients [in person prior to PHE] or [via telehealth since PHE]?"

HCP, healthcare provider; PHE, public health emergency; APA, American Psychiatric Association

1. Kroeger K. Corporate Advisory Council Meeting: American Psychiatric Association Foundation. Lecture presented via: Zoom Video Conference; June 17, 2020.

2. Cordina J, et al. Physicians examine options in a post-COVID-19 era. McKinsey & Company. Published June 12, 2020. Accessed November 4, 2020.

# Telehealth Models for the Assessment of TD

- ▶ Depending on patient access, there are multiple telehealth models that can be utilized to assess TD
- ▶ **Mixed on-site office visits and telehealth**
  - In-person visits include a full assessment with a movement scale (e.g., AIMS) interspersed with follow-up visits via telehealth<sup>1</sup>
- ▶ **Remote clinic site with assistance by on-site staff**
  - With the patient and support staff on-site, the clinician can oversee the appointment via telehealth, including a thorough AIMS examination<sup>1</sup>
- ▶ **Patient at home with or without caregiver**
  - Using available guidance for best practices<sup>2</sup>, TD can be assessed reliably using telehealth<sup>3</sup>

## 2020 APA Schizophrenia Guidelines – TD Screening Recommendations<sup>4</sup>

- Clinical assessment at baseline and at each visit
- Before starting or changing antipsychotic medication
- Assessment using a structured instrument (e.g., AIMS, DISCUS)
  - At baseline, if such movements are present
  - Every 6 months in patients at high risk of TD
  - Every 12 months in other patients
  - If a new onset or exacerbation of preexisting movements is detected at any visit

AIMS, Abnormal Involuntary Movement Scale; APA, American Psychiatric Association; DISCUS, Dyskinesia Identification System Condensed User Scale

1. Jain R. Can the AIMS exam be conducted via telepsychiatry? *Psychiatry & Behavioral Health Learning Network*. Published December 9, 2019. Accessed July 21, 2020. 2. American Academy of Neurology. *Telemedicine and COVID-19 Implementation Guide*. American Academy of Neurology; 2020. Updated April 10, 2020. Accessed July 21, 2020. 3. Amarendran V, et al. The reliability of telepsychiatry for a neuropsychiatric assessment. *Telemed J E Health*. 2011;17(3):223-225. 4. APA Practice Guideline for Treatment of Patients with Schizophrenia. Accessed on January 11 2020. <https://www.psychiatry.org/psychiatrists/practice/clinical-practice-guidelines>

# Recommendations from TD Experts: Audio Assessment of TD

- ▶ Patients without access to technology or sufficient broadband may require audio-only telehealth
- ▶ A visual observation is required to fully assess or diagnose TD<sup>1</sup>; audio-only evaluation of TD is limited to self-reporting<sup>2</sup>
- ▶ Part of the ongoing care of patients with TD includes the continual assessment of the physical, mental, social burden they may be facing<sup>3</sup>
- ▶ In a telephone appointment, a patient can report any functional difficulties related to abnormal movements related to TD<sup>4</sup>



## Examples of direct, descriptive questions<sup>4</sup>:

- “Do you experience any emotional difficulties related to movements, such as embarrassment?”
- Do you have a desire to avoid others?
- Do you feel isolated or depressed because of your movements?”
- “Do you have any difficulties:
  - Putting away glasses?
  - Writing?
  - Walking, talking or breathing?”

1. Schooler NR, et al. Research diagnoses for tardive dyskinesia. *Arch Gen Psychiatry*. 1982;39:486–487. 2. Kopelovich SL, et al. Community mental health care delivery during the COVID-19 pandemic: practical strategies for improving care for people with serious mental illnesses [published online ahead of print, 2020 Jun 19]. *Community Ment Health J*. 2020;1-11. 3. Dr. Richard Jackson on assessing and monitoring TD through telepsychiatry. Psychiatry & Behavioral Health Learning Network. Published June 15, 2020. Accessed July 21, 2020. 4. Caroff SN. Overcoming barriers to effective management of tardive dyskinesia. *Neuropsychiatr Dis Treat*. 2019;15:785-794.

# Recommendations from TD Experts: Video Assessment of TD

- ▶ Observe the following body regions with and without activation: eyes, lips, face, hands, fingers, shoulders, and tongue<sup>1</sup>
  - Consider modeling what you want the patient to do, especially for activation maneuvers<sup>2</sup>
- ▶ Laptops or tablets provide a clearer visual of the patient's arms, legs, and feet as opposed to a phone screen<sup>2</sup>
  - The camera can be tilted downward to examine the patient's feet and toes<sup>1</sup>
- ▶ A caregiver or family member can hold the camera to better display the patient's movements<sup>2</sup>

## Data Evaluating the Video Assessment of TD:

- Compared to in-person evaluation, there were no significant differences when using standardized movement scales, such as AIMS, via telehealth<sup>3</sup>
- Observational gait analysis via telehealth was found to be reliable compared with in-person evaluation, even at low-bandwidth internet speeds<sup>4</sup>



AIMS, Abnormal Involuntary Movement Scale

1. Jain R. Can the AIMS exam be conducted via telepsychiatry? *Psychiatry & Behavioral Health Learning Network*. Published December 9, 2019. Accessed July 28, 2020. 2. Citrome L. Treating TD in the COVID-19 era: 5 steps to success. *Psychiatry & Behavioral Health Learning Network*. Published June 8, 2020. Accessed July 28, 2020. 3. Amarendran V, et al. The reliability of telepsychiatry for a neuropsychiatric assessment. *Telemed J E Health*. 2011;17(3):223-225. 4. Hatcher-Martin JM, et al. Telemedicine Work Group of the American Academy of Neurology Update. *Neurology*. 2020;94:30-38.

# Summary

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- ▶ Telehealth use has increased since COVID-19 was declared a public health emergency
- ▶ Many providers and patients are interested in continuing telehealth moving forward
- ▶ Routine screening for TD is recommended and can be conducted through a variety of telehealth models
- ▶ Audio-only telehealth encounters can be used to gather self-reported information on functional or emotional difficulties
- ▶ Video assessment of TD can be as reliable as in-person evaluation if best practices are followed

# Back-up



# APA Member Telehealth Survey

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- ▶ Survey was distributed and collected during May 2020 for a duration of 2 weeks
- ▶ 571 respondents
- ▶ Respondent Practice Settings
  - Private Practice – 39%
  - Group Office Practice: 15%
  - University/Academic – 23%
  - Community Mental Health – 12%