

***Jose Leon MD, MPH***

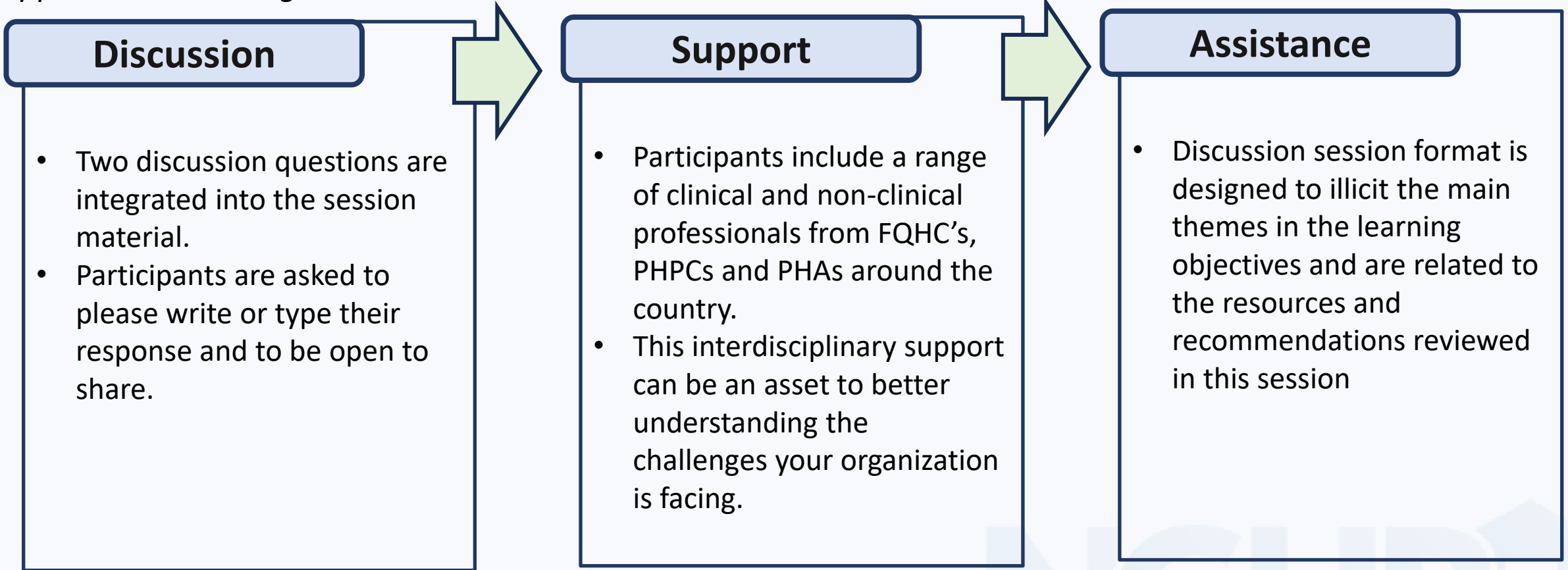
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*This session is designed to illicit discussion, process sharing and support between colleagues. The session framework will reflect these priorities. The – Discussion – Support – Assistance model describes NCHPHs approach to Training and Technical Assistance*



NCHPH presentations are designed to be utilized as external resources by FQHCs PHPCs and PHAs these can be freely circulated to partners and colleagues as needed.

## Research and Clinical Resources

- Cited resource links are located at the bottom right of the slides.
- Resources are publicly available and can be shared internally or externally.
- Cited research is investigated and validated during a structured review process.

## Guidance and Recommendations

- Recommendations are based on NCHPH internal research or validated external research.
- Practice recommendations presented are reviewed and validated by the NCHPH team.

## Support and Consultation Resources

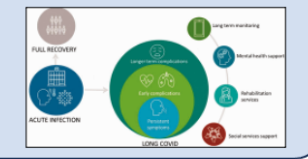
- NCHPH staff members and SMEs are available to FQHCs, PHPCs, PHAs and partner organization for consulting and advising services.

### Long-COVID: Mental Health and Systemic Sequelae

Review  
**Symptoms, complications and management of long COVID: a review**

Olakunle Lee Adegboye<sup>1,2,3,4,5</sup>, Sarah E. Hughes<sup>1,2,3</sup>, Grace Turner<sup>1,2</sup>, Samantha Cruz Rivera<sup>1,2,4</sup>, Christel McMillan<sup>1,2</sup>, Jash Singh Chandel<sup>1</sup>, Shamil Haroon<sup>1</sup>, Gary Prior<sup>5</sup>, Ella Haf Davies<sup>6</sup>, Krishnarajah Nirantharakumar<sup>1,7</sup>, Elizabeth Sapey<sup>8,9</sup>, Melanie J Calvert<sup>1,2,3,4,10</sup>, and on behalf of the TIC Study Group

**Abstract**  
Globally, there are now over 160 million confirmed cases of COVID-19 and more than 3 million deaths. While the majority of infected individuals recover, a significant proportion continue to experience symptoms and complications after their acute illness. Patients with long COVID experience a wide range of physical and mental/psychological symptoms. Prevalence data showed the 10 most prevalent reported symptoms were fatigue, shortness of breath, muscle pain, joint pain, headache, cough, chest pain, altered smell, altered taste and diarrhoea. Other common symptoms were cognitive impairment, memory loss, anxiety and sleep disorders. Beyond symptoms and complications, people with long COVID often reported impaired quality of life, mental health and employment issues. These individuals may require multidisciplinary care involving the long-term monitoring of symptoms, to identify potential complications, physical rehabilitation, mental health and social services support. Resilient healthcare systems are needed to ensure efficient and effective responses to future health challenges.





Resource download: [Symptoms, complications and management of long COVID: a review](#)



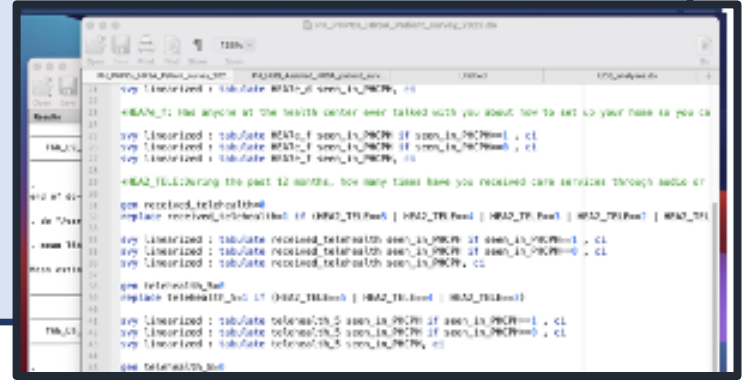

**HRSA Health Center Program** Practice Recommendations: HRSA Patient Survey

**Question MEN1E\_r (recode)**  
“During the past 30 days how often did you feel that everything was an effort all or most of the time?”

Percent of patients reporting any of these feelings in the past 30 days:

 <b>All FQHC* patients</b> <b>9.4%</b> CI: 7.2-12.1	 <b>All HUD-Assisted*</b> <b>17.2%</b> CI: 4.8-17.5
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Link to Resource: [2022 Health Center Patient Survey](#)



# Emotional Wellbeing and Housing Status: 2022 HRSA Health Center Patient Survey

n (weighted) = 27,224,243

Symptoms reported in past 12 months	All other Housing (%)	95% CI	All HUD-assisted* (%)	95% CI	p	Public Housing (%)	95% CI	p
Any feelings of worthlessness	15.2	12.2-18.7	21.1	13.7-30.1	0.15	26.1	15.0-41.4	0.046
Any feelings that everything is an effort	29.8	25.4-34.5	43.1	32.4-54.6	0.009	40.7	27.5-55.4	0.13
Feeling everything is an effort all or most of the time	9.4	7.2-12.1	17.2	10.9-23.5	0.012	9.4	4.8-17.5	0.86
Any feelings of hopelessness	18.3	15.2-21.7	24.1	16.1-34.5	0.17	29.5	17.5-45.4	0.06
Feeling hopeless most or all of the time	3.8	2.6-5.6	5.4	2.5-11.2	0.4	5.4	1.7-15.5	0.58
Any feelings of restlessness or fidgeting	34.3	29.6-39.4	42.1	33.9-50.8	0.067	41.3	27.6-56.6	0.35
Any feelings of nervousness	39.12	34.3-44.1	40.9	31.73-50.7	0.07	39.5	26.9-53.7	0.9
Feeling nervous all or most of the time	8.3	6.3-10.9	10.9	6.9-17.0	0.28	12.7	6.3-24.0	0.24
Any feelings of extreme sadness	29.1	25.2-33.3	41.1	31.6-51.3	0.013	44.6	30.1-60.1	0.034

\* Includes Section 8 Voucher, Housing Choice Voucher, Project-based Section 8 and other HUD PH programs

## Emotional Wellbeing and Housing Status: 2022 HRSA HSPS

Feelings reported, past 12 months	All other Housing (%)	HUD-assisted* (%)	<i>p</i>	Public Housing (%)	<i>p</i>
Worthlessness	15.2	21.1	0.15	26.1	0.046
Apathy	29.8	43.1	0.009	40.7	0.13
Constant apathy	9.4	17.2	0.012	9.4	0.86
Hopelessness	18.3	24.1	0.17	29.5	0.06
Restlessness	34.3	42.1	0.067	41.3	0.35
Nervousness	39.12	40.9	0.07	39.5	0.9
Extreme sadness	29.1	41.1	0.013	44.6	0.034

*Significant relationships were noted in 6/9 PHQ-9 domains*



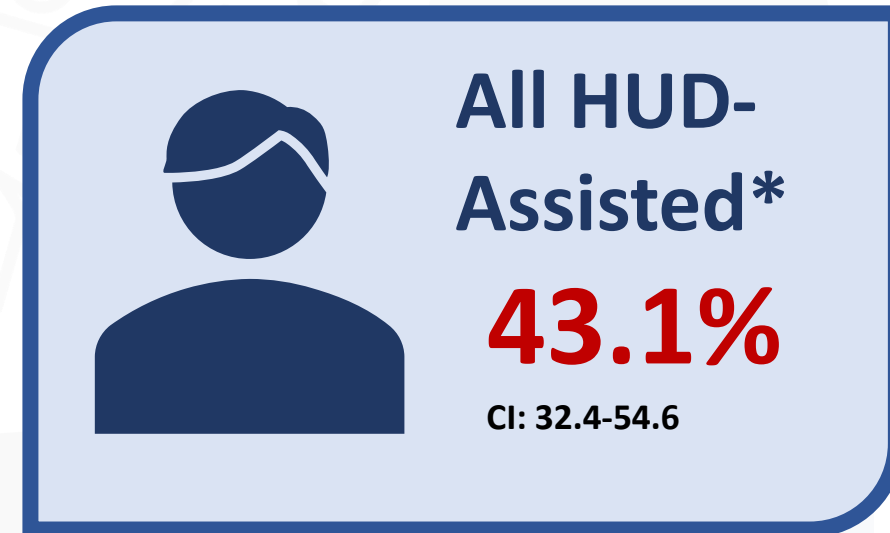
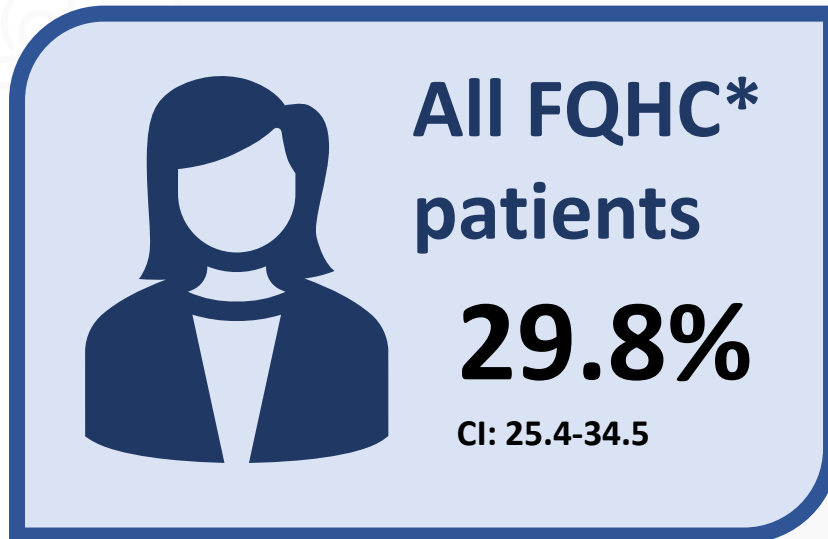
*HUD-Assisted and PH patients were significantly more likely to experience acute and chronic negative emotional wellbeing*



## Question MEN1B\_r (recode)

“During the past 30 days how often did you feel that everything was an effort”

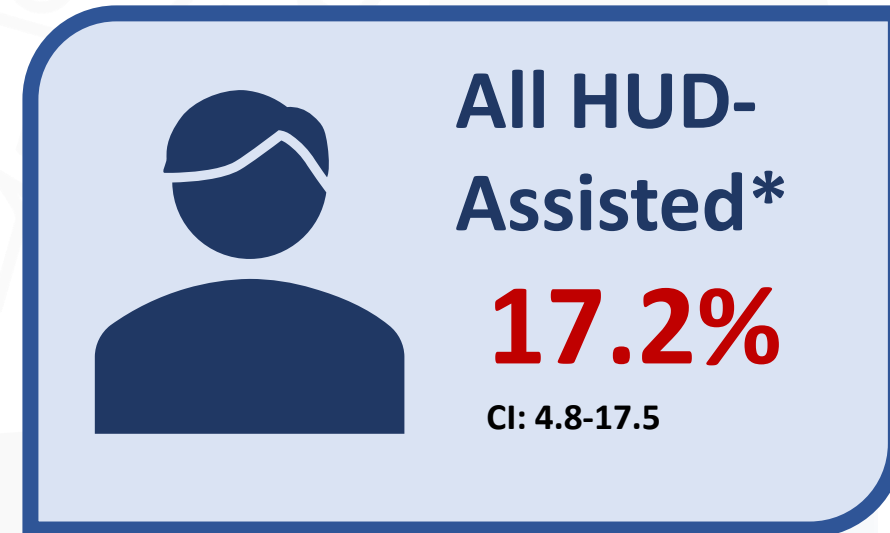
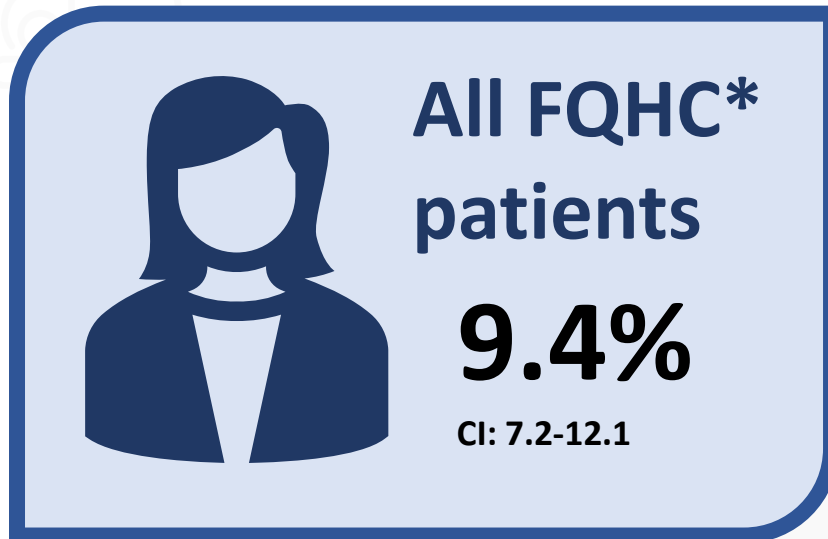
**Percent of patients reporting any feelings of nervousness in the past 30 days:**



## Question MEN1E\_r (recode)

“During the past 30 days how often did you feel that everything was an effort all or most of the time?”

Percent of patients reporting any of these feelings in the past 30 days:

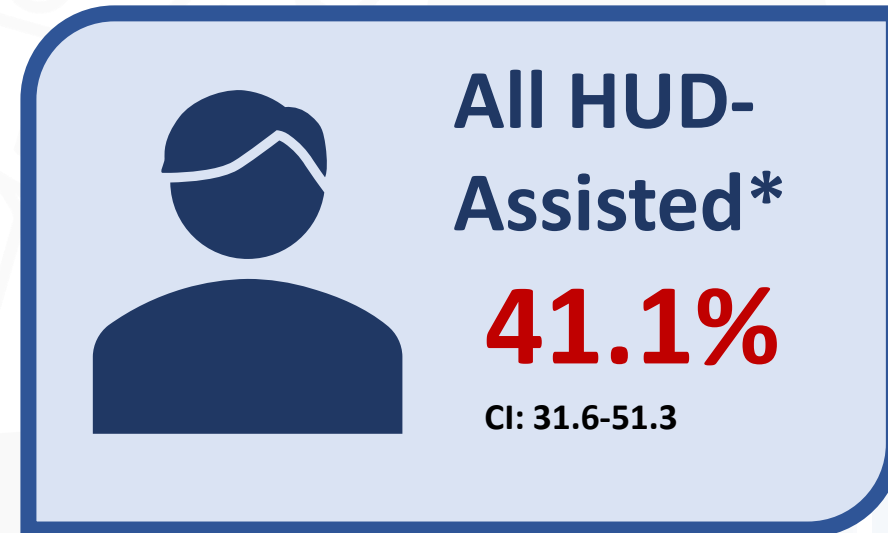
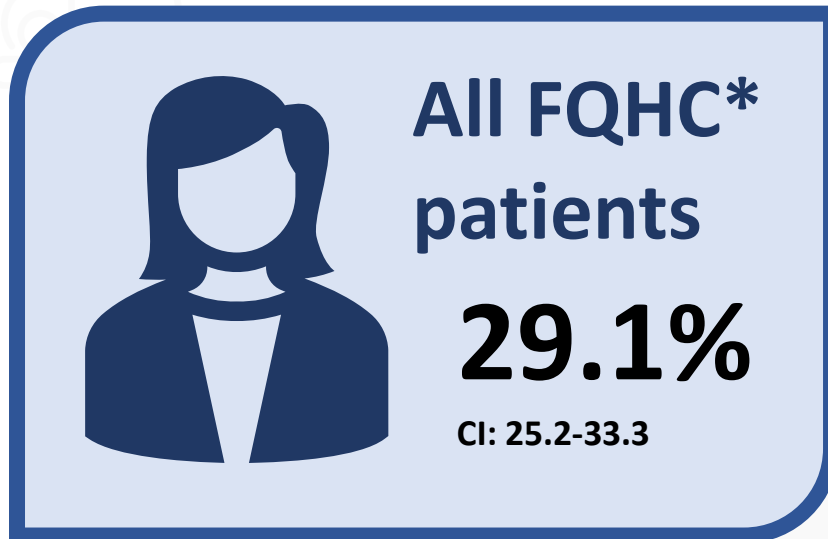




## Question MEN1a (recode)

“During the past 30 days, how often did you feel so sad that nothing could cheer you up?”

Percent of patients reporting these feelings in the past 30 days:





## Self-reported disability details by housing type: HRSA Health Center patient survey (2022)

n (weighted) = 27,224,243	All other Housing (%)	95% CI	All HUD-assisted* (%)	95% CI	<i>p</i>	Public Housing (%)	95% CI	<i>p</i>
Deaf or serious difficulty hearing	7	5.3-9.3	10.1	5.9-16.8	0.3646	9.6	4.5-21.2	0.7321
Blind or serious difficulty seeing	8	5.9-10.2	13.4	8.9-20.5	0.0458	12.8	6.8-23.0	0.1807
Difficulty with self-care such as washing or dressing	10.9	8.8-13.5	22.8	15.6-32.0	0.0005	22.4	12.8-36.2	0.0254
Difficulty with eating	6.3	4.9-8.1	10	5.4-18.0	0.1973	17.5	9.0-31.2	0.0014
Difficulty getting out of bed or chairs	13.4	10.7-16.6	23.1	17.1-30.5	0.0037	27.5	17.0-41.2	0.011
Has fallen in the past 12 months	20.1	17.1-24.6	25.9	18.4-35.2	0.4245	21	12.6-33.0	0.9536
Fallen more than 4 times in past 12 months	3.7	2.4-5.8	6.1	2.4-14.4	0.3305	4.7	1.4-14.7	0.7688
Patient experienced any injury as the result of reported falls	41.9	35.3-48.7	58.9	42.1-73.8	0.0585	58.2	35.7-77.7	0.2588

## Self-reported disability details by housing type: 2022 HRSA HSPTS

	All other Housing (%)	All HUD-assisted* (%)	<i>p</i>	Public Housing (%)	<i>p</i>
n (weighted) = 27,224,243					
Deaf or serious difficulty hearing	7	10.1	0.4	9.6	0.7
Blind or serious difficulty seeing	8	13.4	0.04	12.8	0.18
Difficulty with self-care	10.9	22.8	0.0005	22.4	0.02
Difficulty with eating	6.3	10	0.2	17.5	0.001
Difficulty getting out of bed or chairs	13.4	23.1	0.004	27.5	0.01
Has fallen in the past 12 months	20.1	25.9	0.4	21	0.9
Fallen >4x last 12 months	3.7	6.1	0.3	4.7	0.7
Any injury as the result of falls	41.9	58.9	0.05	58.2	0.2



*HUD-assisted and RPH were more likely to report deficits in self care than other patients*



*A significant proportion of HUD-assisted and RPH patients struggled with symptoms of disability*