

ACADEMY OF SPINAL CORD INJURY PROFESSIONALS

Applying a Standardized Process Flow for Outpatient Rehabilitation Fall Reduction in Patients with Spinal Cord Injuries

Frazier Rehabilitation Institute

Amanda Oakley PT, DPT, NCS; Taylor Poe PT, DPT; Misty Agne, MA, CCC-SLP, CBIST; Richard Skiff, MS, LSSBB

UL Health

Background

- The rate of falls and inconsistent documentation in outpatient rehabilitation within Frazier Rehab, specifically within the Outpatient Spinal Cord Injury Clinic, have led to financial claims and an increased liability to the organization.
- Research^{2,5,6} suggests fall prevention be led by clinicians and to bring focus specifically on patients with spinal cord injury due to important risk factors for falls unique to only this patient population.

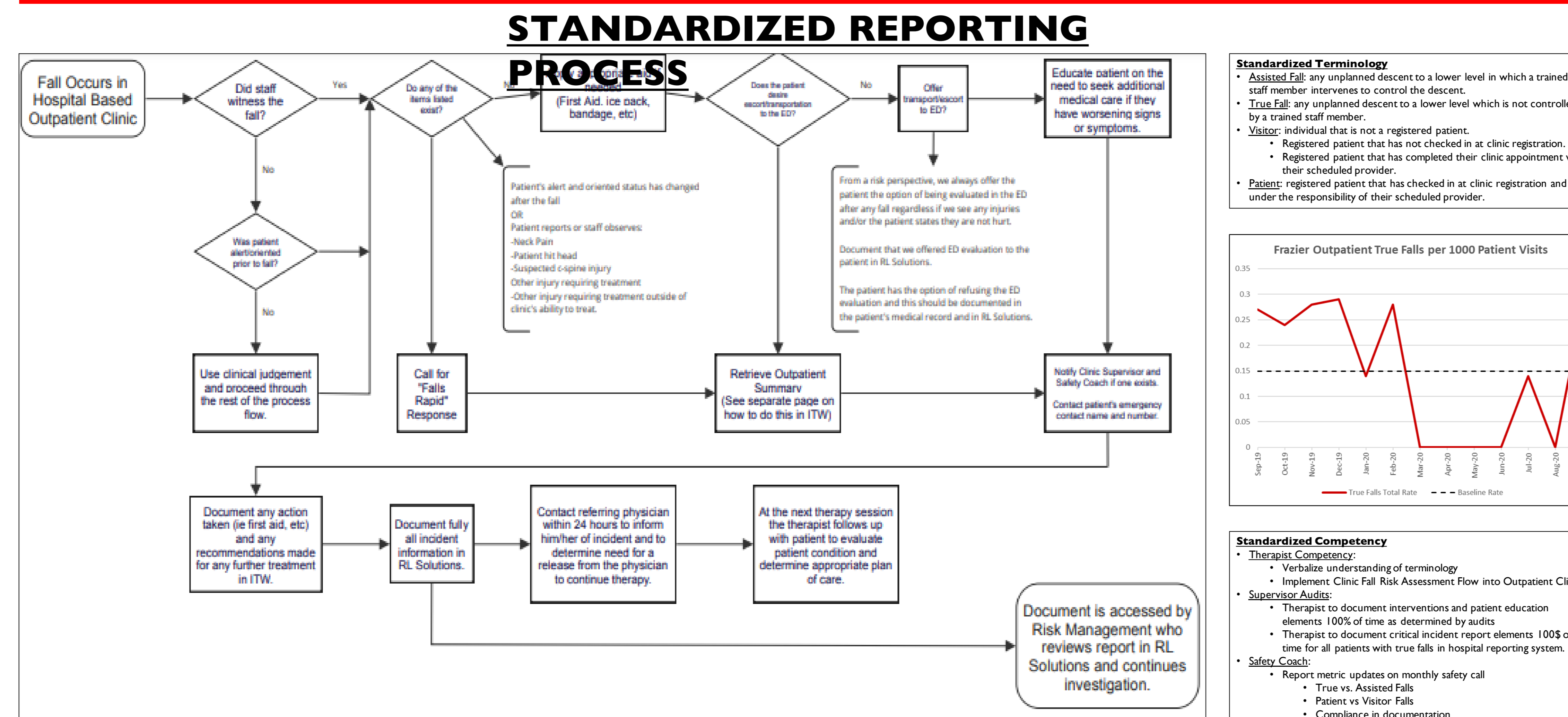
Purpose

- Demonstrate application of standardized process flow to reduction of outpatient falls in the spinal cord population.
- Discuss key elements in clinical documentation and organization specific incident reporting across the multidisciplinary team.
- Illustrate evidence-based assessments utilized to predict the risk and reduce the overall incidence of falls.

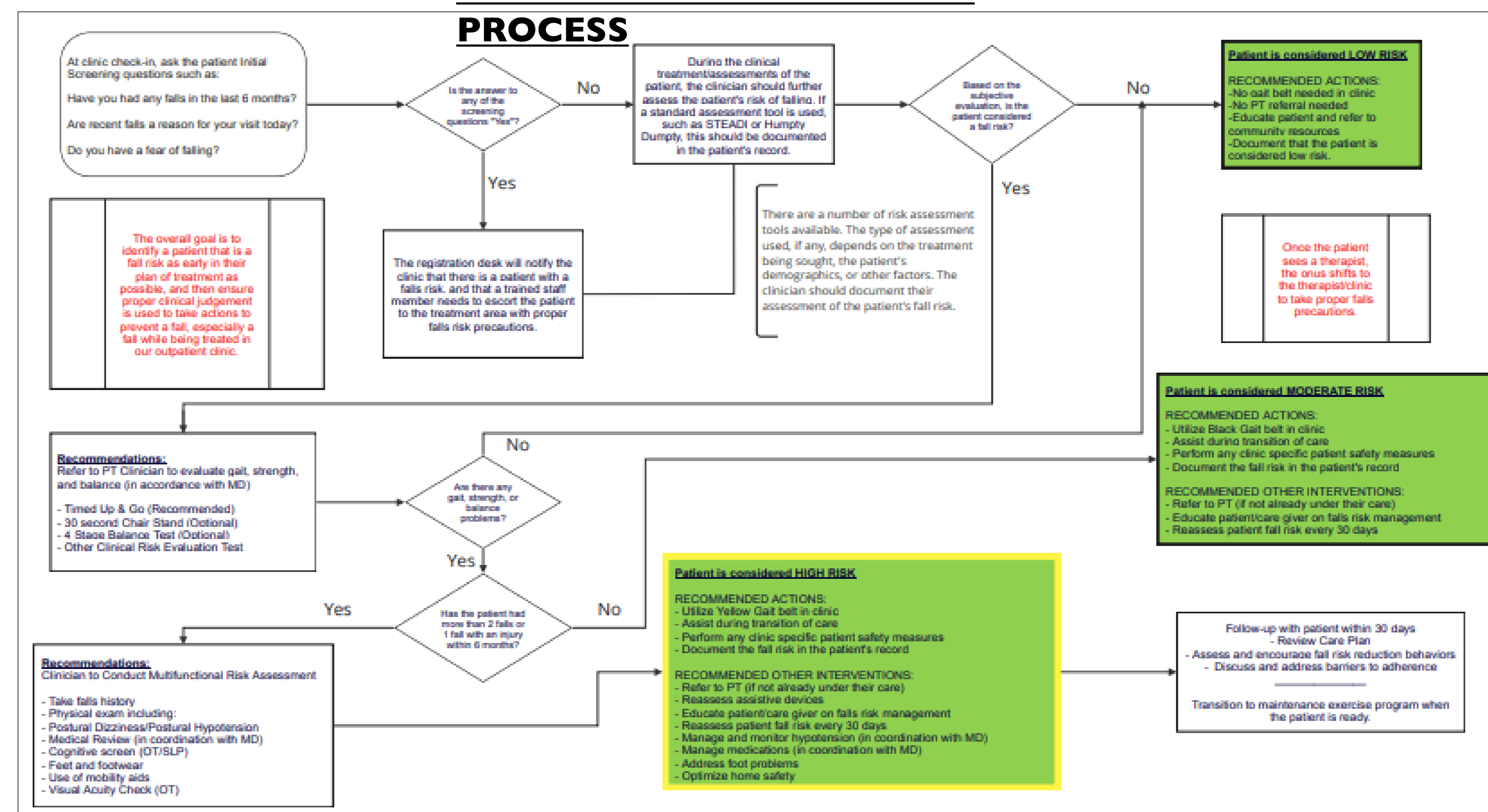
Methods

- A multidisciplinary committee spanning the organization's various clinics was created to establish a standardized process for assessing a patient's risk of falling and steps to be taken immediately after a fall.
- This was important to establish the need for clinician decision-making related to specific diagnosis and encompass all disciplines of care.
- This committee produced process improvements to the steps to establish fall risk, communicated risk amongst the team, and defined actions immediately after the fall to maximize patient care and safety.

Results



STANDARDIZED FALL RISK PROCESS



Discussion

Research^{1,3}, supports the use of fall prevention algorithms and assessments; however, the use of the STEADI was studied and intended for those 65 and older not all non-pediatric individuals. Similarly, the Humpty Dumpty Fall Scale identifies hospitalized children not outpatients at risk for fall; therefore, limitations existed in the ability to consider assessments as valid and reliable outcome measure, but merely a screen to maximize patient safety and generate need for additional multidisciplinary referrals and/or testing.

Conclusion

A reduction in overall falls was noted throughout the organization, specifically in the Outpatient SCI Clinic. While the fall reduction number was not statistically significant for the 6-month data collection following the project implementation, it is anticipated that over time this trend in reduction of falls will produce significant results. Overall, this design is both feasible and clinically appropriate to implement in advanced outpatient clinical practice settings to ensure both patient and staff safety.

References

- Casey C, Parker E, Winkler G, Lamber G, Eckstrom E. Lessons Learned From Implementing CDC's STEADI Falls Prevention Algorithm in Primary Care. *The Gerontologist*. 2017; 57(4): 787-796. doi: 10.1093/geront/gnw074.
- Khan A, Pujol C, Laylor M, Unic N, Pakosh M, Dawe J, Musselman K. Falls after spinal cord injury: a systematic review and meta-analysis of incidence proportion and contributing factors. *Spinal Cord*. 2019;57:526-539. h
- Nithman R, Vincenzo J. How steady is the STEADI? Inferential analysis of the CDC fall risk toolkit. *Archives of Gerontology and Geriatrics*. 2019; 83:185-194.
- Renfro M, Maring J, Bainbridge D, Blair M. Fall Risk Among Older Adult High-Risk Populations: a Review of Current Screening and Assessment Tools. *Physical Therapy and Rehabilitation*. 2016; 5: 160-171. DOI10.1007/s13670-016-0181
- Singh H, Craven BC, Flett HM, Kerry C, Jaglal SB, Silver MP, Musselman KE. Factors influencing fall prevention for patients with spinal cord injury from the perspectives of administrators in Canadian rehabilitation hospitals. *BMC Health Services Research*. 2019;19(391)
- Singh H, Scovil CY, Bostick G, Kaiser A, Craven BC, Jaglal SB, et al. Perspectives of wheelchair users with spinal cord injury on fall circumstances and fall prevention: A mixed methods approach using photovoice. *PLoS ONE*. 2020;15(8): e0238116.