Same-day Discharge After Elective Percutaneous Coronary Intervention: Where Is The Barrier? Auhtor’s reply

Muhammad Rashid, MBBS1, Paraskevi Taxiarchi, MSc 2, Mamas A. Mamas, DPhil, 1,3

1. Keele Cardiovascular Research Group, Institute of Primary Care and Health Sciences, University of Keele and Academic Department of Cardiology, Royal Stoke Hospital, Stoke-on-Trent, UK
2. Health eResearch Centre, Farr Institute, University of Manchester, UK.
3. Division of Population Health, Health Services Research & Primary Care; University of Manchester; Manchester; UK

Corresponding author:

Prof. Mamas A. Mamas

Keele Cardiovascular Research Group,

Centre for Prognosis Research

Keele University,

Stoke-on-Trent, UK

E-mail: mamasmamas1@yahoo.co.uk

Tel: +44 1782 671654

Fax: +44 1782 734719

We thank the correspondents for their careful appraisal of our national analysis on the use of same-day discharge (SDD) practice and clinical outcomes in patient admitted for elective percutaneous coronary intervention (PCI) in United Kingdom(1).

Lozano et al highlight the importance of use SDD and the potential costs savings associated with such practice in patients undergoing elective PCI(2). However, the adoption of SDD has unfortunately lagged behind even in contemporary practice with data suggesting that less than a quarter of physicians in the US and Canada practice SDD (3). We share the opinion of Lozano and colleagues that one of the potential reasons for the delayed adoption of SDD may be related to lack of financial incentives for the healthcare providers. However, there are number of other factors associated with increased adoption of SDD practice observed in our study. Transradial access (TRA) was a strong independent predictor of SDD in our study which is known to be associated with reduced risk of vascular complications and early discharge(4). Currently, TRA is default access site in UK practice with more recent national audit figure suggesting that almost 90% of the all PCI are undertaken via TRA. In comparison, although use of TRA is increasing in other national practices such as US and Canada, the overall use remains less than 50%(5).

Bed occupancy, particularly in the winter months runs at 99% in the United Kingdom, with elective cases often cancelled in such times of bed shortages. This has contributed to the development of a dedicated “day-case lounge” model for elective PCI procedures allowing increased throughput, early discharge, increase bed capacity and significant costs savings (6) avoiding such cancellations. Finally, the funding and resource allocations in a universal healthcare system such as ours differs from other systems where healthcare services are funded by a hybrid system of private insurance and state funding. Therefore, there is less financial incentive to admit the patient overnight for monitoring as there may be in other systems. In conclusion, there are many potential drivers of SDD practice such as increased adoption of TRA, dedicated day-case lounge and institutional pathways to allow better resource allocation. We are investigating these factors in more detail in the forthcoming publications to better understand the main drivers of SDD.

References

1. Taxiarchi P, Kontopantelis E, Martin GP, et al. Same-Day Discharge After Elective Percutaneous Coronary Intervention: Insights From the British Cardiovascular Intervention Society. JACC Cardiovasc Interv 2019;12:1479-94, S1936-8798(19)30814-3 [pii].

2. Lozano I, Rondan J, Vegas M Jose, et al Same-Day Discharge After Elective Percutaneous Intervention: Where Is The Barrier? ( In Press)

3. Din JN, Snow TM, Rao SV, et al. Variation in practice and concordance with guideline criteria for length of stay after elective percutaneous coronary intervention. Catheter Cardiovasc Interv 2017;90:715-22, 10.1002/ccd.26992 [doi].

4. Rashid M, Rushton CA, Kwok CS, et al. Impact of Access Site Practice on Clinical Outcomes in Patients Undergoing Percutaneous Coronary Intervention Following Thrombolysis for ST-Segment Elevation Myocardial Infarction in the United Kingdom: An Insight From the British Cardiovascular Intervention Society Dataset. JACC Cardiovasc Interv 2017;10:2258-65, S1936-8798(17)31706-5 [pii].

5. Shroff AR, Fernandez C, Vidovich MI, et al. Contemporary transradial access practices: Results of the second international survey. Catheter Cardiovasc Interv 2019;93:1276-87, 10.1002/ccd.27989 [doi].

6. Brewster S, Khimdas K, Cleary N, et al. Impact of a dedicated "radial lounge" for percutaneous coronary procedures on same-day discharge rates and bed utilization. Am Heart J 2013;165:299-302, 10.1016/j.ahj.2012.10.003 [doi].