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## Midterm Follow Up For Knee Replacement: How Well Do We Follow Our Patients?

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# Midterm Follow Up For Knee Replacement: How Well Do We Follow Our Patients?

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## Introduction

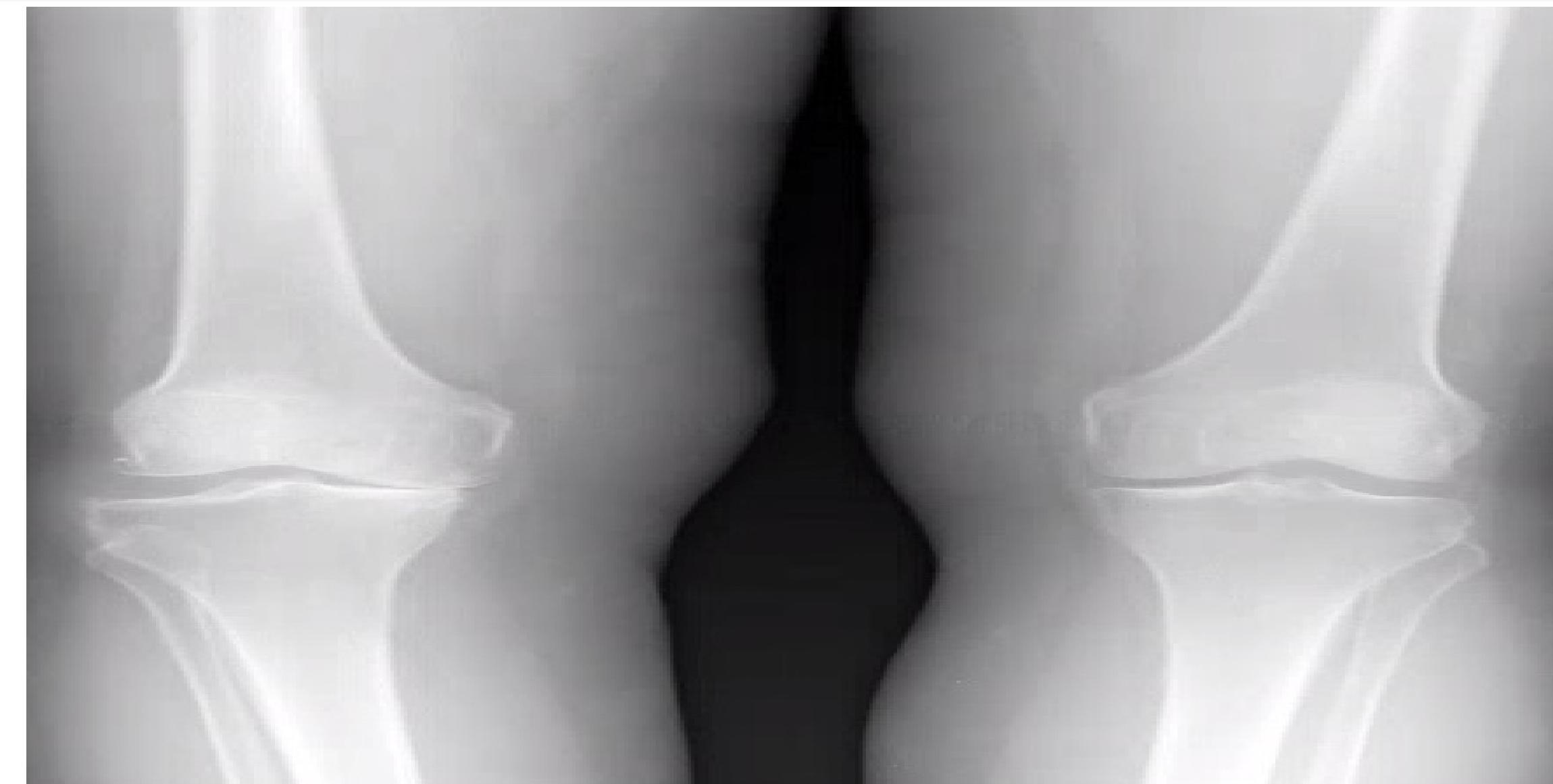
No standardized surveillance intervals exist for monitoring joint arthroplasties, and asymptomatic patients may be lost to follow up. While cost and other factors may impact follow up, periodic clinical visits are essential for diagnosis and monitoring of silent conditions such as wear or osteolysis (Murray et al. 1997). Early intervention for these problems may mitigate risk of serious complications such as periprosthetic fracture and can reduce the overall cost of care. The aim of this study was to quantify the patients who are lost to follow up so that future efforts can be directed towards improved surveillance.

## Methods

Deidentified patient scheduling data was gathered for those who had not scheduled five year post-operative appointments following unicompartmental knee arthroplasties (UKAs) for a single physician at VCU Health Department of Orthopaedic Surgery.

Information gathered included:

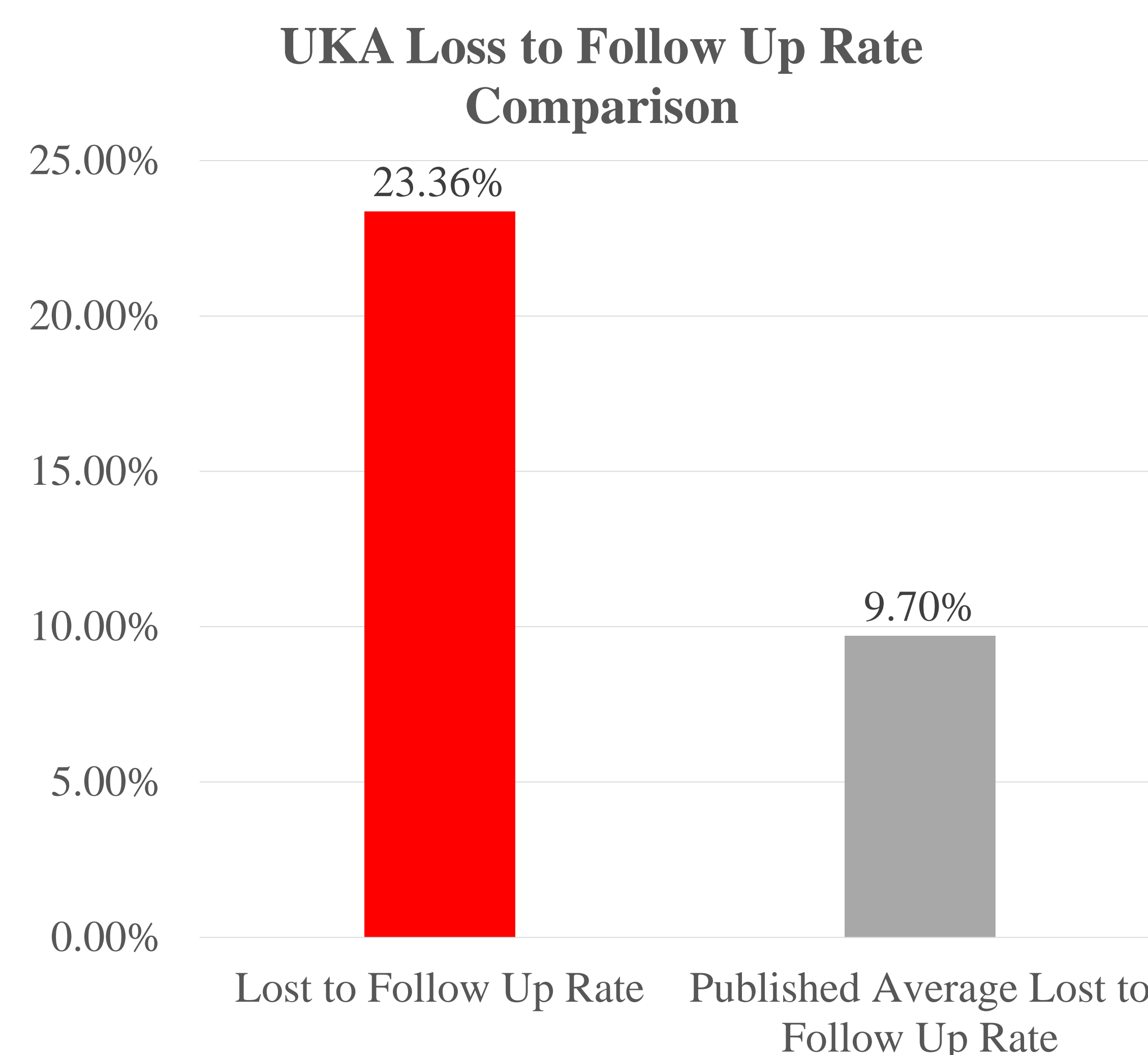
- Total number of patients with UKA from 1/2007-12/2010
- Number of those patients without a five year follow up visit scheduled with VCU Health
- Reason for lack of follow up visit was explored by receiving input from administrative staff members



**Fig.1:** Anterior-Posterior X-Ray showing joint space narrowing isolated to the medial compartment of the right knee. This is a typical pre-operative x-ray for a patient that requires a partial knee replacement surgery.



**Fig.2:** Anterior-Posterior weight bearing X-Ray after a right medial partial knee replacement surgery.



**Graph 1:** Lost to follow up rate compared to the most recent published average as defined by a meta analysis of 10 UKA studies with 753 total patients at 5 years after surgery

## Results

Total	
UKA patients	172
Lost to Follow Up	40 (23.36%)

### Reason for Lost to Follow Up

Wrong phone number or out of service	11 (27.5%)
Deceased	2 (5%)
Unreturned phone calls	17 (42.5%)
Unscheduled	10 (25%)

**Table 1:** Summary of lost to follow up data collected

## Discussion

The lost to follow up rate specifically for five year post surgical UKAs is significantly higher for this population subset than the most recent published average as seen in a meta analysis review (Callahan et al. 1995). Follow up visits allow for proper assessment of complications such as wear and osteolysis which need early intervention to improve long-term outcomes and reduce the overall cost of care (Bhandari et al. 2012). Eleven patients, 27.5% of those that were lost to follow up, were without a correct or working phone number, which presents a significant barrier to care. Maintaining updated patient contact information and educating patients about the importance of intermittent follow up may aid in compliance. Further research is required to better characterize patients with poor follow up rates so that systematic surveillance methods can be developed to improve the quality of care.

## References

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- Callahan, Christopher M., et al. "Patient outcomes following unicompartmental or bicompartmental knee arthroplasty: a meta-analysis." *The Journal of arthroplasty* 10.2 (1995): 141-150.
- Bhandari, Mohit, et al. "Clinical and economic burden of revision knee arthroplasty." *Clinical medicine insights. Arthritis and musculoskeletal disorders* 5 (2012): 89.