

## Demographic categories

### Income

Bennett, Roger. "[Queues, customer characteristics and policies for managing waiting-lines in supermarkets.](#)" *International Journal of Retail & Distribution Management* 26, no. 2 (1998): 78-87.

Abstract: Shoppers leaving four supermarkets were questioned about their attitudes toward having to wait in lines. It was found that the shoppers' perspectives on waiting in line were determined by their location, in a rich or poor neighborhood, as well as their subjective evaluations whether their families were better-off or worse-off than other families.

Discussion (excerpt): Critically important as a determinant of customer attitudes towards queuing, nevertheless, was whether the customer came from an affluent rather than a poor area and (relatedly) the perceived relative income level of his or her family. Type A people residing in the prosperous area exhibited sharper aversion against queuing than Type As generally. Affluent customers were less tolerant of unanticipated hold-ups and more upset by the scenario describing the illegitimate use of an express checkout. Overall it seemed that the better-off the shopper the greater were his or her expectations vis-a-vis the management of checkout services, including the belief that an express checkout cashier should take firm action to prevent the abuse of express waiting-line facilities.

Clarey, A. J., and M. W. Cooke. "[Patients who leave emergency departments without being seen: literature review and English data analysis.](#)" *Emergency Medicine Journal* 29, no. 8 (2011): 617-21.

Abstract: As one would expect, excessive waiting times are the predominant causative factor listed by patients for choosing to LWBS; factors that further promote higher LWBS rates include periods of ED overcrowding, lack of department management by an emergency medicine trained physician and temporal factors including seasonal and holiday-associated variance. The consequence of these additional factors is an increase in waiting times, which inevitably raises LWBS rates. The fact that waiting times are so important in determining LWBS means that data from overseas may not be applicable in the UK, where total time in the ED is significantly less than in the USA, where most of the data originate. The literature suggests risk factors that increase a patient's likelihood of LWBS; being in a lower socioeconomic status group, being young and not speaking English (where English is the indigenous language). In addition, there is correlation in patients who have previous episodes of LWBS; suggestive of a pattern in healthcare-seeking behaviour. Although of little relevance for the NHS, data indicate a further increased risk of LWBS if a patient has no health insurance.

Pham, Julius Cuong, George K. Ho, Peter M. Hill, Melissa L. McCarthy, and Peter J. Pronovost. "[National Study of Patient, Visit, and Hospital Characteristics Associated With Leaving an Emergency Department Without Being Seen: Predicting LWBS.](#)" *Academic Emergency Medicine* 16, no. 10 (2009): 949-55.

Abstract: This was a retrospective cross-sectional analysis using the National Hospital Ambulatory Medical Care Survey (NHAMCS) from 1998 to 2006. Bivariate and multivariate analyses were performed to identify predictors of LWBS. The national LWBS rate was 1.7 (95% confidence interval [CI] = 1.6 to 1.9) patients per 100 emergency department (ED) visits each year. In multivariate analysis, patients at extremes of age (<18 years, odds ratio [OR] = 0.80, 95% CI = 0.66 to 0.96; and ≥65 years, OR = 0.46, 95% CI = 0.32 to 0.64) and nursing home residents (OR = 0.29, 95% CI = 0.08 to 1.00) were associated with lower LWBS rates. Nonwhites (black or African American (OR = 1.41, 95% CI = 1.22 to 1.63) and Hispanic (OR = 1.25, 95% CI = 1.04 to 1.49), Medicaid (OR = 1.47, 95% CI = 1.27 to 1.70), self-pay (OR = 1.96, 95% CI = 1.65 to 2.32), or other insurance (OR = 2.09, 95% CI = 1.74 to 2.52) patients were more likely to LWBS.

Discussion (excerpt): We found that many patient, visit, and institutional characteristics affected this national LWBS rate. Young adults (18–39 years old) were the most likely to LWBS. Minorities (black or African Americans and Hispanics) and those who lack private insurance were also associated with a significantly higher risk of LWBS. This is consistent with other single-institution studies suggesting that the disadvantaged are at increased risk of LWBS. [1,14,21,23–25](#) These data are concerning because the patients who tend to LWBS are more likely to lack access to alternative primary care and be more at risk for adverse events

Sun, Benjamin C., Emily Spilseth Bilstadt, Andrea Pelletier, and Carlos Camargo.

["Characteristics and temporal trends of “left before being seen” visits in US Emergency Departments, 1995–2002."](#) *The Journal of Emergency Medicine* 32, no. 2 (February 2007): 211–15.

Abstract: The purpose of this study was to describe nationally representative characteristics and temporal trends in “left before being seen” (LBBS) visits in US emergency departments (EDs). The ED portion of the federal National Hospital Ambulatory Medical Care Survey, 1995–2002, was analyzed. Of the 810.6 million ED visits during the 8-year study period, an estimated 11.4 million (1.41%, 95% confidence interval [CI] 1.30–1.52) had an LBBS disposition. The number and proportion of LBBS visits have increased over time, from 1.1 million visits in 1995 (1.15%, 95% CI 0.95–1.35) to 2.1 million visits in 2002 (1.92%, 95% CI 1.67–2.17). LBBS patients were more likely to be younger, non-White, Hispanic, urban, and uninsured compared to non-LBBS patients. The number and proportion of LBBS visits have increased over time. LBBS visits disproportionately affect vulnerable populations. These findings suggest that recent strains on the US ED system are adversely affecting healthcare quality and access.

Discussion (excerpt): Second, we demonstrate that minority and uninsured patients disproportionately represent LBBS visits. These findings suggest that vulnerable groups have reduced access to timely ED care compared to other patients. Other studies in public hospitals and metropolitan areas with a high proportion of uninsured patients report substantially higher rates of LBBS than noted in our report ([1,2,5](#)). Further research is needed to determine if a subset of these patients could be safely treated in a primary care setting.

## Race

National Study of Patient, Visit, and Hospital Characteristics Associated With Leaving an Emergency Department Without Being Seen: Predicting LWBS (Pham et al. 2009)

[see above]

Shaikh, Sanober, David Jerrard, Michael Witting, Michael Winters, and Michael Brodeur. ["How Long Are Patients Willing to Wait in the Emergency Department Before Leaving Without Being Seen."](#) *Western Journal of Emergency Medicine* 13, no. 6 (2012): 463–67.

Abstract: Our goal was to evaluate patients’ threshold for waiting in an emergency department (ED) waiting room before leaving without being seen (LWBS). We analyzed whether willingness to wait was influenced by perceived illness severity, age, race, triage acuity level, or insurance status. We conducted this survey-based study from March to July 2010 at an urban academic medical center. After triage, patients were given a multiple-choice questionnaire, designed to ascertain how long they would wait for medical care. We collected data including age, gender, race, insurance status, and triage acuity level. We looked at the association between willingness to wait and these variables, using stratified analysis and logistic regression. Of the 375 patients who were approached, 340 (91%) participated. One hundred seventy-one (51%) were willing to wait up to 2 hours before leaving, 58 (17%) would wait 2 to 8 hours, and 110 (32%) would wait indefinitely. No association was found between willingness to wait and

race, gender, insurance status, or perceived symptom severity. Patients willing to wait >2 hours tended to be older than 25, have higher acuity, and prefer the study site ED.

Characteristics and temporal trends of “left before being seen” visits in U.S. emergency departments, 1995-2002 (Sun et al. 2007)

[see above]

Tropea, Joanne, Vijaya Sundararajan, Alexandra Gorelik, Marcus Kennedy, Peter Cameron, and Caroline A. Brand. "[Patients Who Leave Without Being Seen in Emergency Departments: An Analysis of Predictive Factors and Outcomes.](#)" *Academic Emergency Medicine* 19, no. 4 (2012): 439-47.

Abstract: This was a retrospective observational study of Victorian ED patient visits between July 1, 2000, and June 30, 2005, using linked hospital, ED, and death registration data. There were 239,305 LWBS episodes, for 205,500 patients over the 5-year period. Independent factors associated with LWBS patients in comparison to those who completed treatment include patients who are younger (15 to 24 years, OR = 2.46, 99% CI = 2.37 to 2.56), male (OR = 1.07, 99% CI = 1.05 to 1.08), of Australian indigenous background (OR = 1.63, 99% CI = 1.53 to 1.73), of non-English-speaking background (OR = 1.08, 99% CI = 1.06 to 1.10), noncompensable status (OR = 1.73, 99% CI = 1.68 to 1.79), self-referring (OR = 1.46, 99% CI = 1.43 to 1.49), nonassisted arrival mode (OR = 1.35, 99% CI = 1.30 to 1.40), and those with a hospital admission in the 12 months before the ED presentation (OR = 1.53, 99% CI = 1.51 to 1.55).

## Gender

Chebat, Jean-Charles, Narjes Haj Salem, Jean-François Poirier, and Claire Gélinas-Chebat. "[Reactions to Waiting Online by Men and Women.](#)" *Psychological Reports* 106, no. 3 (2010): 851-69.

Abstract: The goal of the present study was to identify factors which may affect the difference between the actual time participants expected to wait for downloading a web page and the perceived waiting time, i.e., the online waiting-time gap. The findings from an experiment in which the music tempo (fast vs slow) and waiting-duration information (presence vs absence) were manipulated showed that sex moderated the relation between the manipulated variables and waiting-time gap; emotional response was more important between the manipulated variables and waiting-time gap than was cognitive response. The type of emotional response with an effect on waiting-time gap varied by sex: pleasure for women and arousal for men. For women, pleasure was affected by their cognitive response, while cognitive response played no significant role for men. For both sexes, information on waiting duration increased the perceived waiting time. This study leads to reconsidering the role of emotional response and sex in evaluating waiting time

Discussion: The empirical model shows a clear-cut differential pattern for men and women. First, while fast tempo increased men's Arousal ratings, it reduced women's Pleasure ratings. Interestingly, these two affective states may influence the waiting-time gap: higher Arousal (for men) and lower Pleasure (for women) make waiting time less acceptable ... While men and women show significantly different patterns, one element is common, i.e., the presence (vs absence) of information on time passing during the wait decreases the acceptability of the wait, which confirms the findings of Antonides, et al. (2002). The relation between information and waiting-time gap is direct for men, while it is more complex for women and involves both cognitive and emotional responses.

Goodacre, S. "[Who waits longest in the emergency department and who leaves without being seen?](#)" *Emergency Medicine Journal* 22, no. 2 (2005): 93-96.

Abstract: Multivariate analysis of routine data collected at the Northern General Hospital, Sheffield between 1 January and 31 December 2001. Patient age, sex, triage priority, postcode, initiator of attendance, mode of arrival,

time, day, and month of presentation were examined as potential predictors of waiting time and risk of leaving without being seen. Waiting time data for 71,331 patients were analysed, along with a further 5,512 patients who left without being seen. Older patients and those with lower triage priority had longer waiting times, while ambulance borne patients had slightly shorter waiting times. Sex, source of referral, and postcode did not predict waiting times. The most powerful predictors of waiting time related to time of presentation, with longer waits being associated with presentation at night, on Mondays or Sundays, and during autumn months. Patients who left without being seen were more likely to be younger, male, lower triage priority, non-ambulance borne, self referred, and presenting at the times when waiting times were longest. Time of presentation, rather than individual patient characteristics, seem to be the most powerful predictors of waiting time. This suggests that concerns about inequity of waiting times should be addressed by reorganisation of staff duty rosters.=

Kellaris, James J., and Susan Powell Mantel. "[The influence of mood and gender on consumers' time perceptions.](#)" *Advances in Consumer Research* 21 (January 1, 1994): 514-18.

Abstract: This study explores the subjective experience of time passage as a function of mood and gender. Because consumers often hear music used as a "time filler," we manipulated instrumental background music in a lab experiment to induce mood states in male and female listeners. Gender was found to moderate the influence of mood on event duration estimates. Specifically, event durations were underestimated to a greater extent by females in less (versus more) positive mood states. We discuss potential commercial applications of our findings and develop directions for future consumer research on time perception.

Discussion (excerpt): Our experimental findings suggest that both gender and its interaction with mood can influence consumers' time perceptions. The data supported our expectation that males would produce more accurate time estimates, whereas females tended to perceive shorter, less accurate durations. Further, while both genders tended to underestimate the duration of a stimulus event (test ad) in relation to clock time, the pattern of time estimates varied systematically across mood conditions, although mood had no apparent influence on time perceptions independently of gender.

Poelmans, Eline, and Sandra Rousseau. "Factors determining authors' willingness to wait for editorial decisions from economic history journals." *Scientometrics* 102, no. 2 (2014): 1347-374.

Abstract: In this contribution, we measure how long researchers are willing to wait (WTW) for an editorial decision on the acceptance or rejection of a submitted manuscript. This measure serves as a proxy for the expected value of a publication to a researcher in the field of economic, business and financial history. We analyze how this WTW measure varies with the characteristics of the submitting authors themselves. We distinguish the impact of personal characteristics (including age, gender and geographic location) as well as work-related characteristics (including research discipline, affiliation and academic position). To identify the factors determining economic history authors' WTW for editorial decisions, we use a valuation technique known as stated choice experiments. Our results show that respondents found the standing of the journal to be at least as important as its ISI impact factor. Moreover, we find differences in publication culture between economic and history departments. Overall, researchers' willingness to wait is influenced to a greater extent by the research discipline in which the respondents are active (history vs. economics), than by their personal characteristics (e.g. the education or the type of Ph.D. they obtained).

How Long Are Patients Willing to Wait in the Emergency Department Before Leaving Without Being Seen (Shaikh et al. 2012)

[see above]

Patients Who Leave Without Being Seen in Emergency Departments: An Analysis of Predictive Factors and Outcomes (Tropea et al. 2012)

[see above]

## Age

Patients who leave emergency departments without being seen: literature review and English data analysis (Clarey and Cook 2011)

[see above]

Who waits longest in the emergency department and who leaves without being seen? (Goodacre 2005)

[see above]

National Study of Patient, Visit, and Hospital Characteristics Associated With Leaving an Emergency Department Without Being Seen: Predicting LWBS (Pham et al. 2009)

[see above]

Factors determining authors' willingness to wait for editorial decisions from economic history journals (Poelmans and Rousseau 2014)

[see above]

How Long Are Patients Willing to Wait in the Emergency Department Before Leaving Without Being Seen (Shaikh et al. 2012)

[see above]

Patients Who Leave Without Being Seen in Emergency Departments: An Analysis of Predictive Factors and Outcomes (Tropea et al. 2012)

[see above]

## **Literature type**

### Marketing and operations research

Queues, customer characteristics and policies for managing waiting-lines in supermarkets (Bennett 1998)

The influence of mood and gender on consumers' time perceptions (Kellaris and Mantel 1994)

### Psychology

Reactions to Waiting Online by Men and Women (Chebat et al. 2010)

### Emergency medicine

Patients who leave emergency departments without being seen: literature review and English data analysis (Clarey and Cook 2011)

Who waits longest in the emergency department and who leaves without being seen? (Goodacre 2005)

National Study of Patient, Visit, and Hospital Characteristics Associated With Leaving an Emergency Department Without Being Seen: Predicting LWBS (Pham et al. 2009)

How Long Are Patients Willing to Wait in the Emergency Department Before Leaving Without Being Seen (Shaikh et al. 2012)

Characteristics and temporal trends of “left before being seen” visits in US Emergency Departments, 1995–2002 (Sun et al. 2007)

Patients Who Leave Without Being Seen in Emergency Departments: An Analysis of Predictive Factors and Outcomes (Tropea et al. 2012)

### Other

Factors determining authors’ willingness to wait for editorial decisions from economic history journals (Poelmans and Rousseau 2014)