When we look at patterns of patient arrival by hour (demand) for an ED, it follows a predictable pattern. When you chart these arrivals in parallel with provider capacity (typically two to two-and-a-half patients per hour), the mismatches of capacity and demand become clear. This inevitably leads to higher wait times.

Figure 3.3

Source: A Note on Managing Wait Lines by Professor Edward Anderson, University of Texas at Austin McCombs School of Business