Outpatients "Satisfied with Consultation Time" Rose from 41.3% in 1996 to 45.4% in 2023, but Among Those Who Answered It Fell from 0.4814 to 0.4652 — In All 9 Yearly Satisfaction Tables "Not Stated" Fell from 12.2–17.5% to 1.8–4.8%, Only 4 of the 9 Can Be Said to Have Risen Wherever the Non-Responders Are Placed, and in 2020, When Questionnaires Began to Be Returned by Mail, "Not Stated" Fell While the Outpatient Response Rate Dropped from 78.7% to 63.1% [M095]

Rise in the share satisfied = part from the share answering + part within those who answered — What separates them is whether more people answered or those who answered became more satisfied

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Abstract

Using the 9 yearly satisfaction tables of the Ministry of Health, Labour and Welfare's Patient's Behavior Survey (5 outpatient items and 4 inpatient items, 10 rounds from 1996 to 2023), the survey outline of each round (response rates and survey method), and the 2023 tables by age, this paper looked at what the yearly satisfaction numbers measure. No new mathematical theorem and no new law are claimed.

First, "satisfied" in the tables is a share whose denominator is all returned questionnaires, including those who did not answer the item ("not stated"). **In all 9 tables, satisfied is larger in 2023 than in 1996, and not stated fell from 12.2–17.5% in 1996 to 1.8–4.8% in 2023** (Section 4).

Second, this is the core of the paper. **Splitting satisfied = share answering × share satisfied among those who answered, the 15.9-point rise in outpatients' overall satisfaction with the hospital becomes 6.84 points from the share answering and 9.06 points from within those who answered. The part from the share answering is more than half of the rise in 3 of the 9 items (outpatient waiting time 0.780, consultation time, and privacy 0.668). For outpatient consultation time, satisfied in the table rose from 41.3% to 45.4%, but the share satisfied among those who answered fell from 0.4814 to 0.4652** (Section 5).

Third, **taking the range between the case where none of the non-responders were satisfied and the case where all of them were, only 4 of the 9 items (outpatient hospital overall, inpatient doctor's care, inpatient privacy, and inpatient hospital overall) have a 1996 upper end that does not reach the 2023 lower end, so that they can be said to have risen however non-responders are placed.** For outpatient waiting time, the range is 26.6–41.8% in 1996 and 32.1–33.9% in 2023, and the two overlap (Section 6).

Fourth, **the outpatient response rate was 78.7, 78.6, and 78.7% in 2011, 2014, and 2017, when survey staff collected questionnaires at the hospital, and 63.1 and 64.7% in 2020 and 2023, when patients returned them by mail. From 2017 to 2020, not stated for outpatients' overall satisfaction fell by 3.2 points, but the response rate fell by 15.6 points.** Non-response moved from "not stated" inside the table to "questionnaires not returned" outside it (Section 7).

Fifth, **those who did not answer are not necessarily like those who did. In 2023, those who did not state their age had a large not stated for overall satisfaction — 7.0% for outpatients (total 2.2%) and 16.8% for inpatients (total 3.5%) — and a small share satisfied among those who answered — 0.516 for outpatients (total 0.654) and 0.548 for inpatients (total 0.703)** (Section 8).

Sixth, what separates them is **whether more people answered or those who answered became more satisfied**. When you hear that "satisfaction has risen," look together at **how much not stated fell, how the response rate moved, and whether it can be said to have risen wherever non-responders are placed**.

Scope note: **This paper claims no new mathematical theorem and no new law** — the satisfaction shares, not stated, and response rates are in public tables and survey outlines, and this paper only split them into the share answering and the share among those who answered, and took the range over where non-responders are placed. **This paper is a structural interpretation of the shape of numbers in public aggregate data; it is not medical advice, not a diagnosis, and not a treatment recommendation. The author is not a physician. Decisions about individual health should be discussed with a physician or a medical institution. This is a preprint that has not been peer reviewed. Satisfaction is a number that asks about patients' attitudes; this paper does not judge the quality of care from whether satisfaction is high or low, and does not evaluate hospitals, hospital types, doctors, the health care system, or policy.** Why satisfaction rose, and how those who did not answer or did not return the questionnaire felt, cannot be known from these tables. The range moves only not stated within returned questionnaires; questionnaires not returned are not included. The split is one choice, weighting by the average of the two years. The response rate is a ratio of counted questionnaires while not stated is a national estimate, so their product is only a rough guide. The survey covers patients of general hospitals; clinics are not included. 2011 (Heisei 23) excludes Iwate, Miyagi, and Fukushima prefectures. **About the data**: the Patient's Behavior Survey (Ministry of Health, Labour and Welfare) tables and the 2023 and 2020 survey outlines were taken from e-Stat and used under the Government of Japan Standard Terms of Use (Version 2.0). The 2017, 2014, and 2011 survey outlines were taken from the Ministry of Health, Labour and Welfare website and used under the Public Data License (Version 1.0). The shares among those who answered, the split, and the ranges in this paper were processed from them. What this paper adds: **splitting the yearly rise in satisfaction into the part from falling not stated and the part within those who answered, counting the items that can be said to have risen over the range of where non-responders are placed, and showing side by side that around the change to mail return, not stated fell while the response rate dropped**.

1. Notation and question

- **Satisfied**: "satisfied, total" in the table (very satisfied + somewhat satisfied), in %.
- **Not stated**: "not stated" in the table (those who did not answer the item).
- **Share answering**: (100 − not stated) ÷ 100. **Share satisfied among those who answered**: satisfied ÷ (100 − not stated). "Other" is counted among those who answered.
- **Split**: satisfied = share answering × share satisfied among those who answered. The difference between 1996 and 2023 is split into the part from the change in the share answering and the part from the change in the share among those who answered, weighting by the average of the two years. The two sum exactly to the difference.
- **Range**: the lower end where none of the non-responders were satisfied (satisfied itself) and the upper end where all were (satisfied + not stated).

Question: Is the yearly rise in satisfaction the part where those who answered became more satisfied, or the part where more people answered?

Observation 1.1: M085 used the same Patient's Behavior Survey to look at the length of outpatient waiting and consultation times. This paper looks at 9 yearly tables, including satisfaction with that waiting time and consultation time, from the side of what the numbers measure.

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2. Preview and design

Written honestly: the design was decided after looking at the tables.

	Content
Tables	Patient's Behavior Survey 2023, basic tabulation, Tables 48–56 (yearly satisfaction, 10 rounds from 1996 to 2023), Tables 42–45 (2023, all satisfaction items by hospital type and by age), and the survey outline of each round
Noticed in the preview	Satisfied rose in all 9, but over the same period not stated fell sharply. Since the tables' denominator includes not stated, satisfied can rise just because not stated falls
Noticed in the preview (2)	From 2020 the method changed to returning questionnaires by mail (table notes). Looking at each round's response rate in the survey outlines, the outpatient response rate dropped sharply around the change
Noticed in the preview (3)	The 2023 table by age has a row for those who did not state their age. That row's satisfied was lower than the total
Comparison	Yearly satisfied, not stated, and share among those who answered; the 1996→2023 split; the range over where non-responders are placed; response rate and not stated; those who did not state their age

3. Data and checks

Calculation 3.1 The 19 retrieved files were fixed by SHA-256, and the following were checked.

- The 9 yearly tables have matching titles, 10 years (1996–2023), and rows. Satisfied = very + somewhat satisfied, dissatisfied = somewhat + very dissatisfied, and satisfied, neutral, dissatisfied, other, and not stated sum to 100, within the 0.1 rounding (largest difference 0.10).
- The 2023 values of the 9 tables match the total rows of the all-item satisfaction Tables 42 (outpatient) and 43 (inpatient).
- Table notes: 2011 (Heisei 23) excludes 3 prefectures. From 2005 (Heisei 17), those "not examined by a doctor" are excluded (waiting-time and consultation-time tables only). In 2020 and 2023 (Reiwa 2 and 5) the method of distributing and collecting questionnaires changed. Not stated in 2011 was 12.7–16.5% for outpatients, larger than the rounds before and after, and 5.4–8.7% for inpatients.

- Response rate: questionnaires distributed, returned, response rate, and valid responses were copied from the tables in the survey outlines of 2011, 2014, 2017, 2020, and 2023. For all 5 rounds it was checked that the numbers are in the PDF, that outpatient + inpatient = total, and that returned ÷ distributed, rounded to 0.1, gives the response rate. The method was "collected at the hospital by survey staff" in 2011–2017 and "returned by mail" in 2020 and 2023.

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4. Yearly satisfied and not stated

Calculation 4.1 Satisfied and not stated (table values, %) and share satisfied among those who answered

Item	Satisfied 1996	Satisfied 2023	Not stated 1996	Not stated 2023	Among answered 1996	Among answered 2023
Out: waiting time	26.6	32.1	15.2	1.8	0.3137	0.3269
Out: doctor's care	47.0	60.2	13.4	2.5	0.5427	0.6174
Out: consultation time	41.3	45.4	14.2	2.4	0.4814	0.4652
Out: privacy	44.7	57.4	17.5	2.5	0.5418	0.5887
Out: hospital overall	48.1	64.0	13.5	2.2	0.5561	0.6544
In: doctor's care	51.6	69.8	12.2	3.6	0.5877	0.7241
In: privacy in room	43.0	58.6	15.3	4.7	0.5077	0.6149
In: meals	31.6	45.5	15.3	4.8	0.3731	0.4779
In: hospital overall	53.7	67.8	12.6	3.5	0.6144	0.7026

Observation 4.2: **In all 9, satisfied is larger in 2023 than in 1996, and not stated fell from 12.2–17.5% to 1.8–4.8%.** The order by rise in satisfied in the table and the order by rise among those who answered differ. In the table the order is inpatient doctor's care (+18.2), outpatient hospital overall (+15.9), and inpatient privacy (+15.6); among those who answered it is inpatient doctor's care (+0.1364), inpatient privacy (+0.1072), and inpatient meals (+0.1049).

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5. The core — part from the share answering and part within those who answered

Calculation 5.1 Splitting the 1996 → 2023 rise in satisfied (points)

Item	Difference	Part from share answering	Part within those who answered	Share-answering part ÷ difference
Out: waiting time	+5.5	+4.29	+1.21	0.780
Out: doctor's care	+13.2	+6.32	+6.88	0.479
Out: consultation time	+4.1	+5.58	− 1.48	1.362
Out: privacy	+12.7	+8.48	+4.22	0.668
Out: hospital overall	+15.9	+6.84	+9.06	0.430
In: doctor's care	+18.2	+5.64	+12.56	0.310
In: privacy in room	+15.6	+5.95	+9.65	0.381
In: meals	+13.9	+4.47	+9.43	0.321
In: hospital overall	+14.1	+5.99	+8.11	0.425

Observation 5.2: **The part from the share answering is 0.310–1.362 of the rise, and more than half in 3 items: outpatient waiting time, consultation time, and privacy. For outpatient consultation time, the part from the share answering is +5.58 against −1.48 within those who answered; the +4.1 rise in satisfied in the table is explained by more people answering alone, and the share satisfied among those who answered fell from 0.4814 to 0.4652.** For the 4 inpatient items the part within those who answered is larger (share-answering part ÷ difference 0.310–0.425).

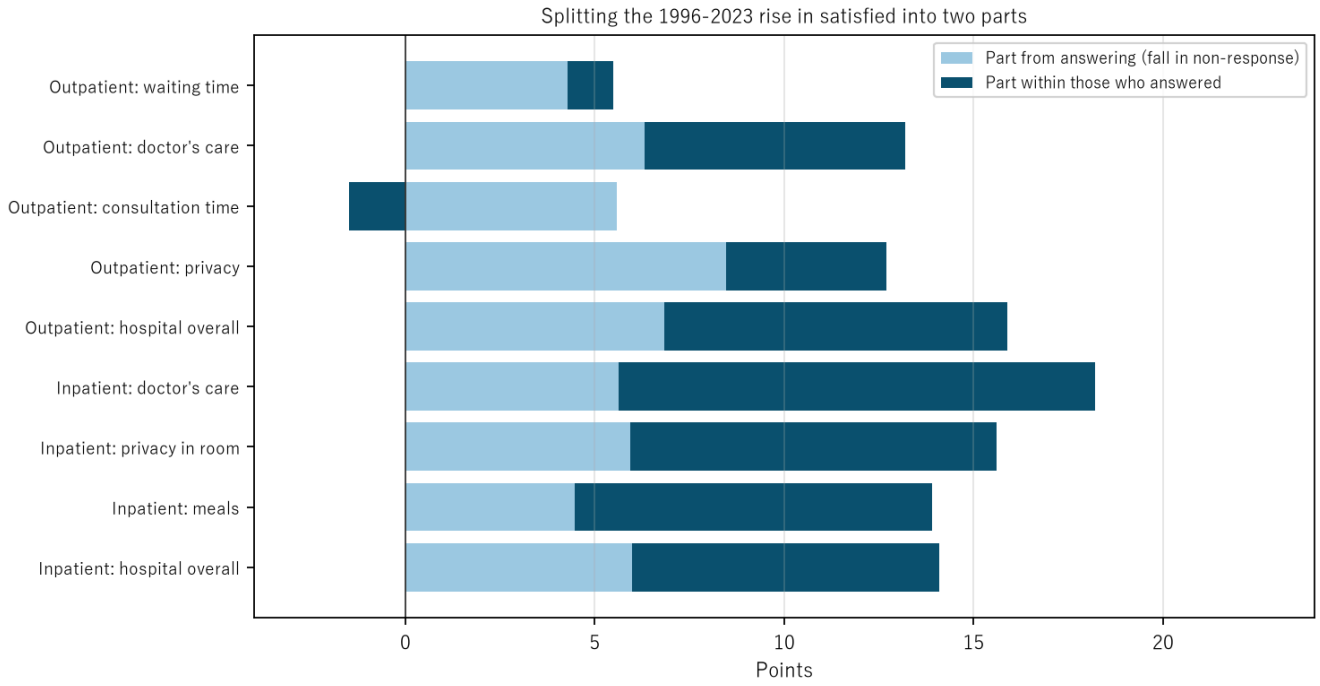


Figure 2: The 1996 → 2023 rise in satisfied, split into the part from the share answering (fall in not stated; light blue) and the part within those who answered (navy). For outpatient consultation time the part within those who answered is negative.

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6. Can it be said to have risen wherever non-responders are placed?

Calculation 6.1 Range between the case where none of the non-responders were satisfied (lower end) and all were (upper end) (%)

Item	Range 1996	Range 2023	Overlap?
Out: waiting time	26.6–41.8	32.1–33.9	Overlap
Out: doctor's care	47.0–60.4	60.2–62.7	Overlap
Out: consultation time	41.3–55.5	45.4–47.8	Overlap
Out: privacy	44.7–62.2	57.4–59.9	Overlap
Out: hospital overall	48.1–61.6	64.0–66.2	No overlap
In: doctor's care	51.6–63.8	69.8–73.4	No overlap
In: privacy in room	43.0–58.3	58.6–63.3	No overlap
In: meals	31.6–46.9	45.5–50.3	Overlap
In: hospital overall	53.7–66.3	67.8–71.3	No overlap

Observation 6.2: **Only 4 of the 9 (outpatient hospital overall, inpatient doctor's care, inpatient privacy, and inpatient hospital overall) can be said to have risen however non-responders are placed.** For outpatient hospital overall, the 1996 upper end of 61.6% falls 2.4 points short of the 2023 lower end of 64.0%. For outpatient waiting time, the 1996 range spans 15.2 points and the 2023 range of 1.8 points lies inside it. To say "it rose" for the other 5, something must be assumed about how the non-responders answered.



Figure 1: Outpatient hospital overall (left) and outpatient waiting time (right). Navy is satisfied in the table, the orange dashed line is the share satisfied among those who answered (x100), and the light blue band is the range over where non-responders are placed.

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7. Non-response moves from inside the table to outside it

Calculation 7.1 Response rate and not stated for overall satisfaction (%)

Year	Collection	Outpatient response rate	Outpatient not stated	Outpatient guide	Inpatient response rate	Inpatient not stated
2011	Collected at hospital by staff	78.7	13.9	0.6776	79.7	6.1
2014	Collected at hospital by staff	78.6	5.2	0.7451	80.1	4.9
2017	Collected at hospital by staff	78.7	5.5	0.7437	79.2	5.0
2020	Returned by mail	63.1	2.3	0.6165	74.4	4.1
2023	Returned by mail	64.7	2.2	0.6328	75.7	3.5

The guide is response rate × (1 − not stated ÷ 100). The inpatient guide is 0.7484 → 0.7618 → 0.7524 → 0.7135 → 0.7305.

Observation 7.2: **In the rounds where survey staff collected questionnaires at the hospital, the outpatient response rate stayed at 78.6–78.7%, and it dropped to 63.1% in 2020 when return by**

mail began. From 2017 to 2020, not stated for overall satisfaction fell by 3.2 points for outpatients and 0.9 points for inpatients, but the response rate fell by 15.6 points for outpatients and 4.8 points for inpatients, and the guide response rate × (1 − not stated) fell from 0.7437 to 0.6165 for outpatients and from 0.7524 to 0.7135 for inpatients. The fall in not stated in the table is not necessarily a fall in non-response; it may include non-response that moved outside the table (questionnaires not returned). From 2017 to 2020 the share satisfied among those who answered moved by +0.0271 to +0.0359 in the 5 outpatient items and +0.0047 to +0.0284 in the 4 inpatient items, and from 2020 to 2023 by −0.0078 to +0.0027 for outpatients. How much of this is the method change cannot be separated with these tables.

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8. Are those who did not answer like those who did?

Calculation 8.1 2023, overall satisfaction with the hospital by age (%)

Age	Outpatient not stated	Outpatient satisfied	Inpatient not stated	Inpatient satisfied
Total	2.2	64.0	3.5	67.8
0–14	1.0	69.2	0.7	81.6
15–39	1.4	67.2	0.9	79.9
40–64	1.5	63.8	2.2	69.4
65–74	1.9	63.2	2.6	67.8
75 and over	3.2	63.8	4.0	66.7
Age not stated	7.0	48.0	16.8	45.6

Observation 8.2: **In the 5 known age groups, not stated rises with age (outpatients 1.0 → 3.2%, inpatients 0.7 → 4.0%). Those who did not state their age have a large not stated for satisfaction and a small share satisfied among those who answered — 0.516 for outpatients (total 0.654) and 0.548 for inpatients (total 0.703). Their outpatient dissatisfied is also 8.6% (total 4.4%).** Those who

left one item blank also answered other items differently from the total. Treating non-responders as like those who answered is an assumption.

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9. Limitations

1. **Why satisfaction rose, and how those who did not answer or did not return the questionnaire felt, cannot be known from these tables.**
2. The range moves only not stated within returned questionnaires; questionnaires not returned (35.3% for outpatients in 2023) are not included.
3. The response rate is a ratio of counted questionnaires and not stated is a national estimate, so the guide is a product of numbers of different kinds. Response rates before 2011 were not examined (pages of the same form were not found).
4. The split is one choice, weighting by the average of the two years, and "other" was counted among those who answered.
5. The paper does not judge the quality of care from whether satisfaction is high or low, and does not evaluate hospitals, doctors, the system, or policy.

Conclusion

In all 9 yearly satisfaction tables satisfied rose, and over the same period not stated fell from 12.2–17.5% to 1.8–4.8%. Outpatient satisfaction with consultation time rose from 41.3% to 45.4% in the table, but among those who answered it fell from 0.4814 to 0.4652. Only 4 can be said to have risen wherever non-responders are placed, and in 2020, when questionnaires began to be returned by mail, not stated fell while the outpatient response rate dropped from 78.7% to 63.1%.

What separates them is one thing — whether more people answered or those who answered became more satisfied.

When you hear that "satisfaction has risen," **check together how much not stated fell, how the response rate moved, and whether it can be said to have risen wherever non-responders are placed.**

Data and reproduction

Data	Patient's Behavior Survey 2023, basic tabulation, Tables 42–45 and 48–56, and survey outlines (2023 and 2020) (Ministry of Health, Labour and Welfare, e-Stat); survey outlines of the 2017, 2014, and 2011 Patient's Behavior Survey (final figures) (Ministry of Health, Labour and Welfare) (retrieved 26 September 2026)
Terms of use	e-Stat follows the Government of Japan Standard Terms of Use (Version 2.0), and the Ministry of Health, Labour and Welfare website follows the Public Data License (Version 1.0). The shares among those who answered, the split, and the ranges in this paper were processed from them and are not numbers produced by the government
Coverage	Japan, outpatients and inpatients of general hospitals, 10 rounds from 1996 to 2023 (response rates for the 5 rounds 2011–2023), 9 satisfaction items
Verification	`検算/M095.py` (`--zu` also draws the figures). Every number in the text is taken from `検算/M095_output.txt`
Raw data	`data/` holds the retrieved files and `SOURCES.md` (URLs, retrieval date, SHA-256, terms of use, definitions and how the calculations were set up)
Figures	`図/M095_zu1` , `図/M095_zu2` (png, svg, English versions)

References

- Ministry of Health, Labour and Welfare. Patient's Behavior Survey 2023, basic tabulation, Tables 42, 43, 44, 45, and 48–56; survey outlines (2023 and 2020) (in Japanese). e-Stat (accessed 26 September 2026). https://www.e-stat.go.jp/

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- Yamagishi, Y. (2026). "A 3-Hour Wait for a 3-Minute Consultation" Was 0.3% of Outpatients in 2014, Indistinguishable Within Rounding from 0.3097%, the Product of Waiting 3 Hours or More (1.9%) and a Consultation Under 3 Minutes (16.3%) — Between Hospital Types the Direction Is Reversed: In 2023, the Higher a Type's Share Waiting 1 Hour or More, the Lower Its Share of Consultations Under 5 Minutes, and the Two Rankings Are Exactly Opposite Across the 5 Types [M085]. Zenodo (unpublished).