

Creating shared value for Novo Nordisk, its patients, and society

Novo Nordisk CCC GLOBAL 2024





By implementing the BMI strategy, Novo Nordisk can solidify its leading position in Obestria and the global obesity market



Context

Novo Nordisk is a **global leader** in the healthcare sector on a mission to **defeat serious chronic diseases** by pioneering scientific breakthroughs, **utilizing partnerships**, expanding access to medicines, and working to **prevent and cure diseases** such as obesity.

Obesity is both multifaceted and fast-growing, and the global healthcare systems are not equipped to meet the needs of PwO, who require a **holistic approach** to their treatment experience - and whose well-being is shaped by the disease's long history of **stigmatisation and societal misconceptions**

Question



How can Novo Nordisk address the needs of PwO and grow its obesity medication business with an **operating profit of 4 DKKbn by 2027**, and **cement its market leadership towards 2035**, by improving the PwO Treatment Experience?

The BMI Strategy

Beyond single use

Improve handling of obesity

medication to increase

convenience and sustainability

Mutual support networks
Introduce obesity support groups
to increase community feeling and
decrease loneliness

Involving the youth
Instigate an educational content
for children and parents to
destignatize obesity

BMI operating profit (in 2027)

Impact

4,600 DKKm Efficiency-driven cost reductions (2035)



Additional patients in treatment (in 2035)





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Adherence to the Novo Nordisk Way can enable a successful capture of the Obestria and global obesity markets



Novo Nordisk at a glance

Owned by the Novo Nordisk Foundation, enabling a long-term focus

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novo nordisk

Strong commitment

and heritage in

innovation

The Novo Nordisk Way underpins every decision made



Aims to defeat serious chronic illnesses

Obestria market characteristics



High demand for obesity medication

65% of adults living with overweight or obesity, with patient pull driving 50-60% of obesity medication prescriptions



Attractive regulatory environment

Low regulatory and political risk due to democratic multi-party system, resulting in foreseeable support schemes - and with obesity medication reimbursement likely to materialise in 2-3 years



Healthcare focus

Stable increase in healthcare spending, up from 5% to 7% of GDP between 2013-2023



Societal values

Innovative and progressive society, ensuring receptibility to initiatives



Takeaway: Novo Nordisk's values and strategic aspirations align with Obestria's near-term needs and support for obesity medication



3 Sources: Case material, Novo Nordisk, Novo Nordisk Foundation

Committed to social

& environmental

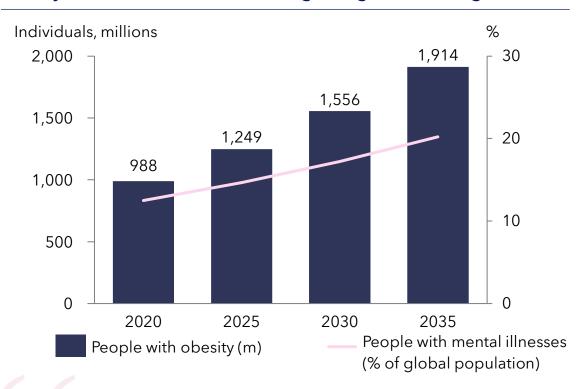
sustainability

Executive Summary Insights Solution **Appendix** Impact

However, with obesity rapidly rising, Novo Nordisk must think beyond just treatment to ensure holistic care for PwO



Obesity and other related diseases are growing at an alarming rate



We now need to increase efforts to prevent, manage and treat obesity throughout the life course. Action must be decisive, people-centred and integrated [...]"

World Obesity Atlas 2023

However, despite its prevalence, patients face low treatment rates & stigma



1.3 billion people in **2025** are expected to live with obesity, with high projected growth until 2035



Of these, **only 2% are using obesity medication** to manage their disease



Despite being declared a disease, **54% of women and 71% of men don't consider obesity a disease**. However, educational sessions saw attitude changes of +30% compared to reference groups



1/3 of Novo Nordisk obesity medication users maintain their prescriptions a year later - approximately three times higher than previous treatments (~13%)



Research shows that 30-50% of prescribed medications **are not taken** as recommended



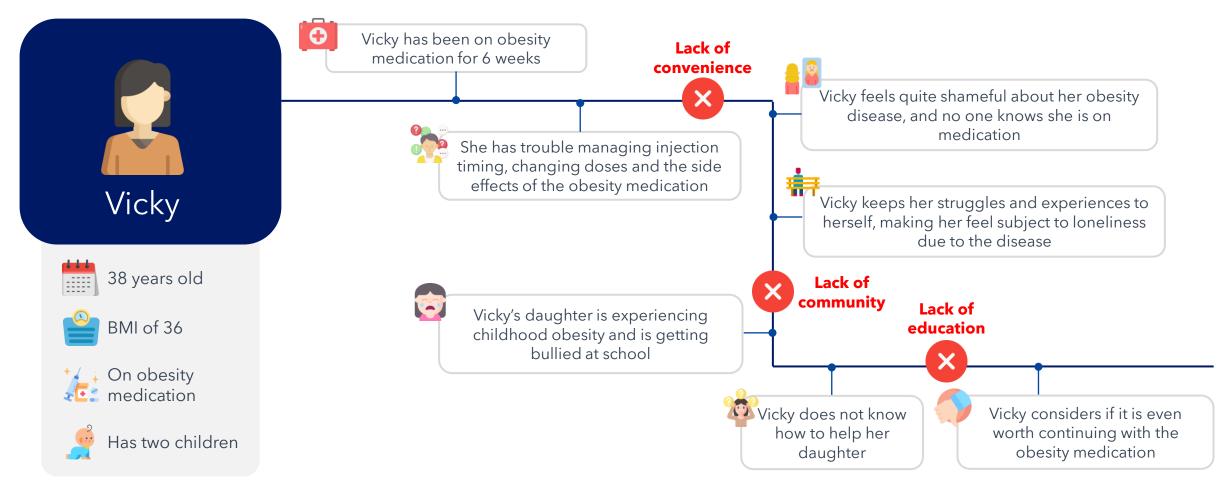
Takeaway: The rapid growth of obesity and related diseases overburdens national healthcare systems, making Novo Nordisk's innovation and success imperative for the safety and well-being of patients globally

Sources: World Obesity Federation (2023), Novo Nordisk Capital Market Day Report (2022), Reuters, Allied Market Research (2023), National Institutes of Health (2017), AMA Journal of Ethics (2018), NORC at the University of Chicago (2016)



A deep dive into a person living with obesity shows the PwO Treatment Experience lacks convenience, community, and education





Takeaway: The lack of convenience, community, and education compromise the PwO Treatment Experience



5 Sources: Team analysis

To overcome the identified pain points, Novo Nordisk must introduce the BMI Strategy to change the narrative and improve the PwO Treatment Experience

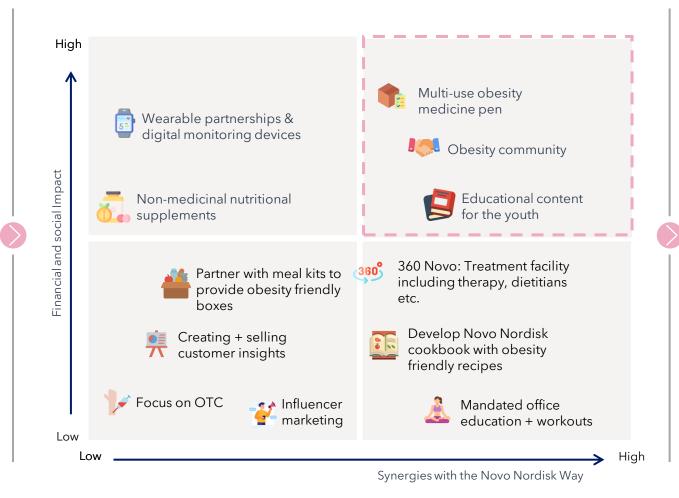


Identified pain points

Lack of convenience

Lack of **community**

Lack of education



The BMI Strategy

Beyond single use

Improve handling of obesity medication to increase convenience and sustainability

Mutual support networks

Introduce obesity support groups to increase community feeling and decrease loneliness

Involving the youth

Instigate an educational content for children and parents to destigmatize obesity



6 Sources: Team analysis





Beyond single use

Improve handling of obesity medication to increase convenience and sustainability



By moving beyond single use pens and introducing the PenPal reminder system, Novo Nordisk can differentiate and stay ahead of new market entrants



Heighten the PwO Treatment Experience with the new Novo EcoPen



Flexible, reusable design

Reusable pen with replaceable cartridges. Strength-based color-coding of cartridges to minimize risk of patient error



Convenience

Recording time (day+hour) since last dose, incorporate "PenPal" reminder and display doses left in the cartridge



Seamless integration

9 Sources: Reuters (2023), Team analysis

An NFC chip at the top enables new possibilities for opt-in-based data collection and transfer to end-users and healthcare professionals



Leveraging existing capabilities

By leveraging knowledge from previous R&D and sustainability capabilities Novo can lower the cost of development, production, and product approval

Introducing the PenPal reminder system



What is PenPal?

An opt-in SMS-based reminder system for users of the EcoPen



Timing mechanism

The timer gets reset with each logged injection through the NFC chip

Why add new product features now?



10 new obesity medication products are expected to be introduced over the next decade





Build customer loyalty before competitors enter the market



Increase optimal treatment adherence amongst product users

Takeaway: By extending its core product features, Novo Nordisk can utilize the competitive lag to solidify its market leading position





Beyond single use

Improve handling of obesity medication to increase convenience and sustainability



Mutual support networks

Introduce obesity support groups to increase community feeling and decrease loneliness



By introducing the support group, Beyond the Scale, Novo Nordisk can help introduce a community and reduce loneliness and stigma associated with obesity



Support groups can help alleviate the loneliness caused by obesity...





NIH Research shows **obesity is significantly associated with** increased levels of loneliness



62% of adults with bad health feel lonely, compared to only 18% of people with good health



Individuals actively **engaged in support groups** are more likely to complete the entire treatment



85% who engage in support groups admit to feeling a sense of **improved personal value**



Alcoholics Anonymous data shows that high meeting attendance improved alcohol abstinence and **allowed participants to express emotions**, improve motivation, and feel understood.



Guidelines for the Beyond the Scale support group



Independently managed without interference of Novo Nordisk - hosted by people living with obesity for people living with obesity



Safe place to share tips and **get advice on challenges** or experiences to **strengthen motivation** for treatment and life with obesity as a disease

Takeaway: With Beyond the Scale, Novo Nordisk can help create community feeling and increase the well-being and the experience of PwO



Executive Summary Insights Solution Impact Appendix

11 Sources: National Institutes of Health (NIH) (2021), Health Survey for England (2021), SRJP, Ohio: Department of Mental Health and Addiction Services



To further reduce obesity's stigmatization, Novo Nordisk must educate the youth through a series of focused and strategic educational content



Involving the youth



Get involved

Novo Nordisk can use its expertise to shape a healthy & scientifically grounded stance towards obesity amongst youth, raising topical awareness and understanding





Collaborative campaigning

Novo Nordisk must avoid conflict of interests and can therefore only serve as a product-agnostic advisor to public entities and educational institutions and through public awareness campaigns and research support (in collaboration with the Novo Nordisk Foundation, pension funds and life insurance firms that share public health incentives)



Engaging the leaders of tomorrow

Educational content is well-suited for physical education, biology and social science classes, and should be engaging and student-centered - for example by quizzing students against common misconceptions or incorporating class-wide discussions

Best-practice examples



Green Schools: Holistic educational programs in environmental preservation, climate change and natural resource depletion - includes classroom resources, teacher development opportunities and educational newsletters



Global School Health Initiative: Holistic educational and engagement program spanning three decades. Promotes healthy lifestyle choices, including obesity prevention efforts

Long-term program aspirations



Up to 80% of obese children and adolescents remain obese during adulthood. Addressing early obesity may greatly **reduce preventable instances of obesity and related illnesses**



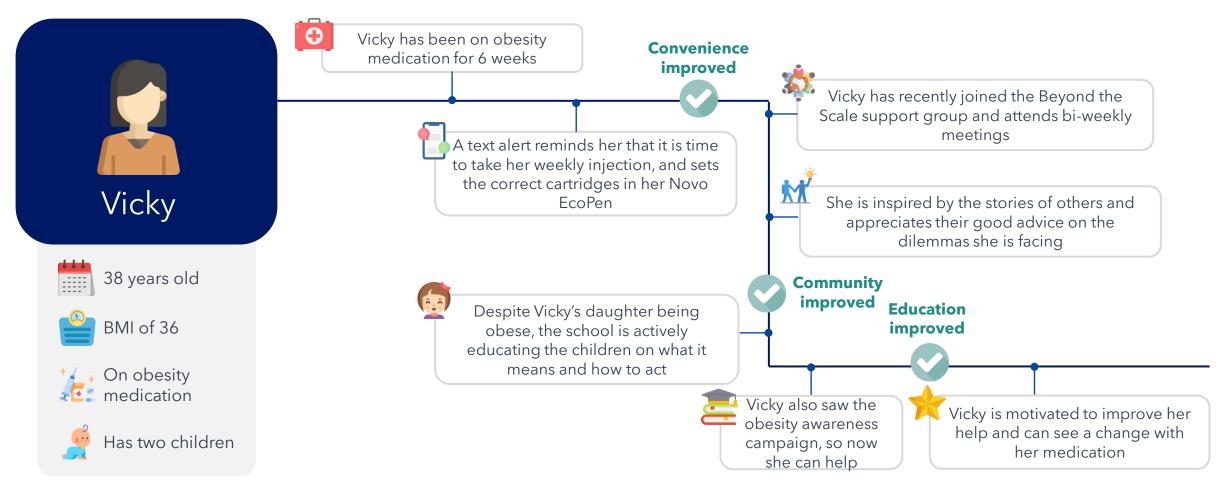
By raising awareness of the health complications of obesity, as well as its multifaceted nature and treatment options, medical treatments of obesity may see an **increase in market penetration** (up from 2%)

Takeaway: By involving the youth, Novo Nordisk can help shape the public debate around obesity for generations to come



Through the implementation of the BMI strategy, Vicky's Treatment Experience now has improved convenience, community, and education





Takeaway: The BMI strategy helps PwO to achieve an improved holistic approach to their Treatment Experience

Solution

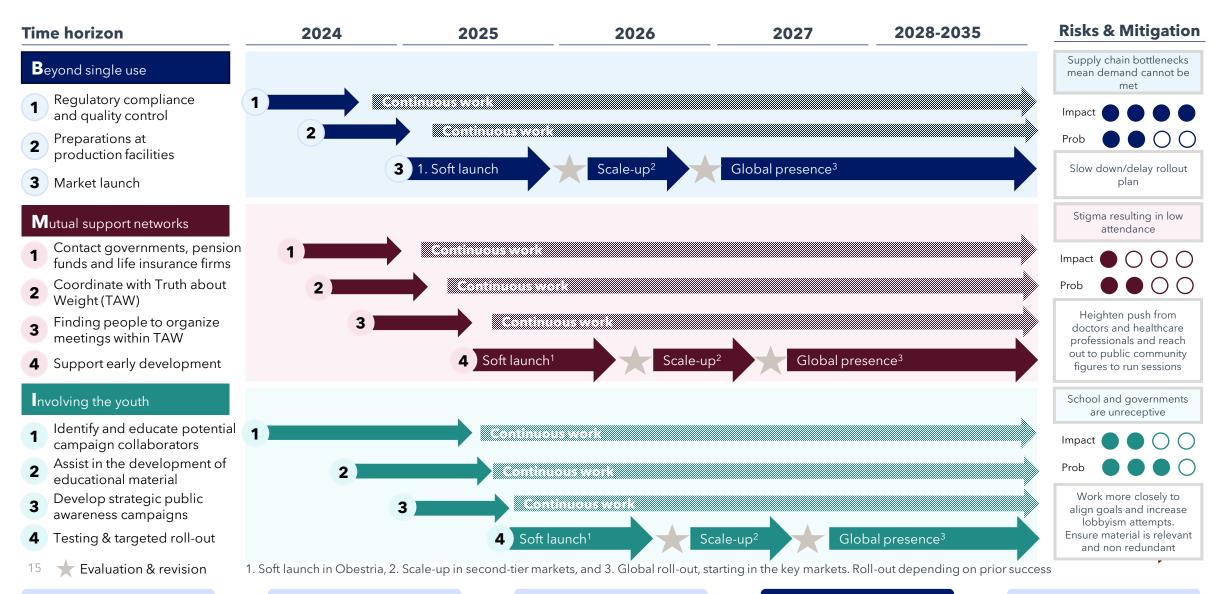


A controlled launch of the BMI strategy accounts for potential supply challenges of obesity medication and ensures a successful roll-out in Obestria and globally



Appendix

Impact



Solution

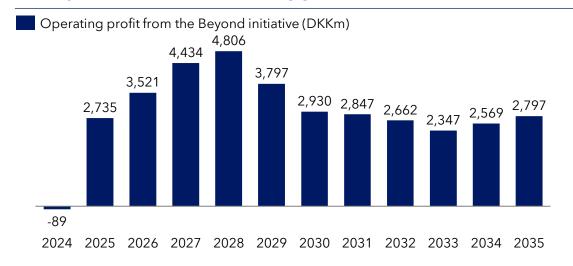
Executive Summary

Insights

Despite low CAPEX requirements, the BMI Strategy achieves substantial operating profit growth as Novo Nordisk's production capacity scales up

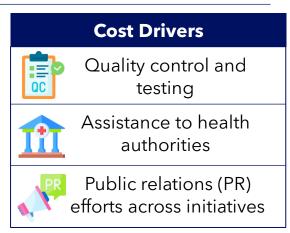


The Beyond initiative ensures strong growth until 2027...

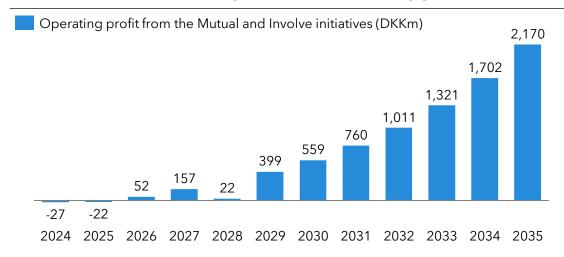


Knowledge of revenue and cost drivers secures financial impact...

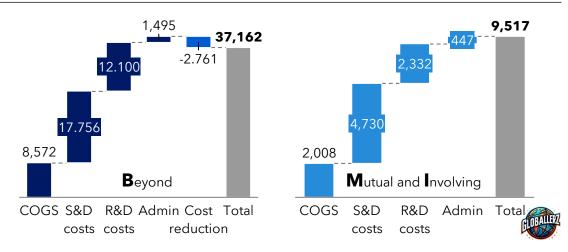
Higher number of retained customers Cost reduction from reusable pens Increased brand awareness



... while Mutual and Involving cement the leadership position for the future



... and the BMI strategy requires incremental investments in fixed costs

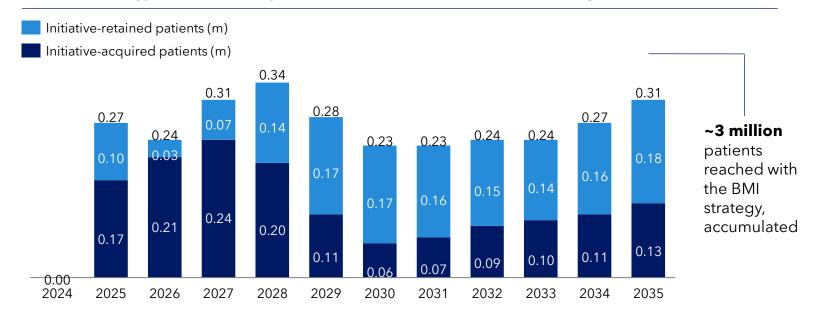


16 Sources: Novo Nordisk's annual report 2023, Team analysis

The implementation of the BMI strategy will also yield non-financial impact, reaching an additional 3 million patients and contributing towards SDG goals



The BMI strategy ensures obesity medication for an additional ~3 million patients worldwide



Pioneering change in the PwO Treatment Experience in times of excess demand

- Novo Nordisk struggles to keep up with the extensive demand and thus, they have invested heavily to increase production capacities. The effects of the investments will solidify from the end of 2025 to 2029
- As Novo Nordisk cannot fully meet the demand for obesity medication in the short term, the BMI strategy also tackles the challenges of the PwO Treatment Experience through alternative solutions, for example support groups for PwO and educational programs.
- This holistic approach to obesity management cements Novo Nordisk's position as a market leader and drives pivotal change for PwO around the world.

Selected SDG impact



Novo Nordisk supports SDG 3 through supporting long-term weight management



By reducing single-use plastics Novo Nordisk contributes to increased sustainable consumption and production patterns



Through encouraging effective partnerships Novo Nordisk utilizes the experience of said partners



17 Sources: United Nationals SDGs, Team analysis

By following the BMI Strategy and improving the PwO Treatment Experience, Novo Nordisk will cement its market leadership in the obesity market



QUESTION

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How can Novo Nordisk address
the needs of PwO and grow its
obesity medication business
with an operating profit of
4 DKKbn by 2027, and
cement its market leadership
towards 2035, by improving
the PwO Treatment
Experience?

RECOMMENDATION

Beyond single use

Improve handling of obesity medication to increase convenience and sustainability

2 Mutual support networks

Introduce obesity support groups to increase community feeling and decrease loneliness

3 Involving the youth

Instigate an educational content for children and parents to destignatize obesity

IMPACT

Operating profit in 2027



Efficiency-driven cost reductions (2035)



Additional patients in treatment (in 2035)





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Novo Nordisk CCC GLOBAL 2024





Appendix 1: Revenue breakdown



Actual values Assumptions based on sources

Actual values A	Assumptions base	ed on sourc	es														11000
Baseline																	
Gross profit	Unit	A2021	A2022	A2023	E2024	E2025	E2026	E2027	E2028	E2029	E2030	E2031	E2032	E2033	E2034	E2035	Total
Revenue Net sales from obesity care	Million DKK	8,400	16,864	41,632	62,448	109,284	163,926	245,889	307,361	353,465	406,485	467,458	537,577	618,213	710,945	817,587	
YoY growth	%	0,400	101%	147%	50%	75%	50%	50%	25%	15%	15%	15%	15%	15%	15%	15%	
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Full-year customers	Millions	0.3	0.6	1.1	2.0	3.5	5.2	7.9	9.8	11.3	13.0	14.9	17.2	19.7	22.7	26.1	
Average customer value	Million DKK	0.03	0.03	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	
Cost of Goods Sold (COGS)																	
COGS from obesity care (based on revenue share)	Million DKK	-1,338	-2,523	-5,900	-8,547	-14,298	-20,712	-30,003	-36,733	-41,676	-47,285	-53,649	-60,869	-69,061	-78,355	-88,900	
YoY growth	%		89%	134%	45%	67%	45%	45%	22%	13%	13%	13%	13%	13%	13%	13%	
Gross profit	Million DKK	7,062	14,341	35,732	53,901	94,986	143,214	215,886	270,628	311,789	359,200	413,809	476,708	549,153	632,590	728,687	
Gross margin	%	84%	85%	86%	86%	87%	87%	88%	88%	88%	88%	89%	89%	89%	89%	89%	
Initiative # 1																	
Incremental revenue	Unit	A2021	A2022	A2023	E2024	E2025	E2026	E2027	E2028	E2029	E2030	E2031	E2032	E2033	E2034	E2035	Total
Existing customers																	
Full-year customers (millions)	Millions	0.3	0.6	1.1	2.0	3.5	5.2	7.9	9.8	11.3	13.0	14.9	17.2	19.7	22.7	26.1	
Persistence rate with Initiative # 1	%	32%	32%	32%	32%	37%	36%	35%	34%	33%	33%	33%	33%	33%	33%	33%	
Remaining customers from previous year	Millions				0.64	1.29	1.88	2.75	3.34	3.72	4.22	4.85	5.58	6.42	7.38	8.48	
Dropouts from previous year	Millions				1.36	2.20	3.35	5.10	6.48	7.56	8.76	10.08	11.59	13.32	15.32	17.62	
New sales in year Change in # of remaining customers	Millions				1.64 _	2.85 0.2	3.94 0.2	5.97 0.2	7.07 0.2	7.95 0.1	9.25 0.1	10.71 0.1	12.31 0.1	14.16 0.1	16.29 0.1	18.73 0.1	
New customers																	
Assumed new customer acquisition	%				0.00%	0.25%	0.50%	0.75%	1.25%	1.25%	1.00%	0.75%	0.50%	0.25%	0.20%	0.15%	
# of new customers	Millions				_	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	
Total # of incremental customers	Millions				=	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.2	0.2	
Average customer value	Million DKK				0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	
Incremental revenue	Million DKK					5,737	7,377	9,221	9,989	7,953	6,097	5,843	5,376	4,637	4,977	5,314	 72,521
As percentage of total revenue from obesity care					0%	5%	4%	4%	3%	2%	2%	1%	1%	1%	1%	1%	
Initiative # 2 & 3																	
Incremental revenue	Unit	A2021	A2022	A2023	E2024	E2025	E2026	E2027	E2028	E2029	E2030	E2031	E2032	E2033	E2034	E2035	Total
Brand perception from people with diabetes	1-100	81.5	81.3	81.4													
Brand perception from people with obesity	1-100	79.4	79.4	77.9													
Improved brand perception	1-100				77.9	77.9	78.3	78.7	79.1	79.5	79.9	80.3	80.7	81.1	81.5	81.9	
Assumed new customer acquisition	%				0.00%	0.00%	0.10%	0.15%	0.20%	0.25%	0.30%	0.35%	0.40%	0.45%	0.50%	0.55%	
# of new customers	Millions				-	-	0.01	0.01	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	
Average customer value	Million DKK				0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	
Incremental revenue As percentage of total revenue from obesity care	Million DKK				0.0%	0.0%	164 0.1%	369 0.2%	615 0.2%	0.2%	1,219 0.3%	1,636 0.4%	2,150 0.4%	2,782 0.4%	3,555 0.5%	4,497 0.6%	 17,870
Total																	
Incremental revenue		A2021	A2022	A2023	E2024	E2025	E2026	E2027	E2028	E2029	E2030	E2031	E2032	E2033	E2034	E2035	 Total
Total customers reached	Millions		7,2722	712020		0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	Potai
Average customer value	Million DKK				0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	
Total incremental revenue	Million DKK				-	5,737	7,541	9,590	10,604	8,837	7,317	7,479	7,526	7,419	8,531	9,811	90,391
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20 Sources: Novo Nordisk's annual report 2023, Case material, Obesity Atlas



Appendix 2: Cost and operating profit breakdown



Actual values Assumptions based on sources

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Initiative # 1																
Incremental costs		A2021	A2022 A2023	E2024	E2025	E2026	E2027	E2028	E2029	E2030	E2031	E2032	E2033	E2034	E2035	Total
Cost of Goods Sold (COGS)																
Incremental COGS based on current gross margin	Million DKK				-751	-932	-1,125	-1,194	-938	-709	-671	-609	-518	-548	-578	-8,572
Total incremental COGS	Million DKK			-	-751	-932	-1,125	-1,194	-938	-709	-671	-609	-518	-548	-578	-8,572
Total COGS (from existing and incremental sales)	Million DKK			-8,547	-15,048	-21,665	-31,173	-38,000	-42,718	-48,136	-54,507	-61,721	-69,889	-79,295	-89,967	
Cost reduction from Initiative # 1	%			0%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	
Cost reduction for total production	Million DKK				75	108	156	190	214	241	273	309	349	396	450	
Total cost reduction				-	75	108	156	190	214	241	273	309	349	396	450	2,760.6
Sales and distribution (S&D) costs																
Incremental S&D costs based on current level				-	-1,400	-1,800	-2,250	-2,437	-1,940	-1,488	-1,426	-1,312	-1,131	-1,214	-1,297	-17,693
Sales representatives				-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-24
Public Relations (PR) efforts				-2	-2	-2	-2	-4	-4	-4	-4	-4	-4	-4	-4	-40
Reduced shipping costs				0.006	0.011	0.017	0.025	0.031	0.036	0.042	0.048	0.055	0.063	0.073	0.084	0.5
Total incremental S&D costs	Million DKK			-4	-1,404	-1,804	-2,254	-2,443	-1,946	-1,493	-1,432	-1,317	-1,137	-1,220	-1,302	-17,756
R&D costs																
Incremental R&D costs based on current level				-	-749	-963	-1,203	-1,304	-1,038	-796	-763	-702	-605	-650	-694	-9,465
Regulatory compliance costs	Million DKK			-10	-7	-13	-20	-27	-33	-33	-33	-33	-33	-33	-33	-310
Quality control and testing	Million DKK			75	-50	-100	-150	-200	-250	-250	-250	-250	-250	-250	-250	-2,325
Total incremental R&D costs				-85	-805	-1,076	-1,373	-1,530	-1,321	-1,079	-1,046	-985	-888	-933	-977	-12,100
Administrative costs																
Incremental administrative costs based on current level	Million DKK				-118	-152	-190	-206	-164	-126	-120	-111	-96	-103	-110	
Total incremental administrative costs				-	-118	-152	-190	-206	-164	-126	-120	-111	-96	-103	-110	-1,495
Total fixed costs	Million DKK			-89	-2,328	-3,032	-3,817	-4,179	-3,432	-2,698	-2,598	-2,413	-2,121	-2,256	-2,389	-31,351
Operating profit	Million DKK			-89	2,735	3,521	4,434	4,806	3,797	2,930	2,847	2,662	2,347	2,569	2,797	35,358
Operating profit margin				N/A	47.7%	47.7%	48.1%	48.1%	47.7%	48.1%	48.7%	49.5%	50.6%	51.6%	52.6%	
Initiative 2 & 3																
Incremental costs		A2021	A2022 A2023	E2024	E2025	E2026	E2027	E2028	E2029	E2030	E2031	E2032	E2033	E2034	E2035	Total
Cost of Goods Sold (COGS)																
Incremental COGS based on current gross margin	Million DKK					-21	-45	-73	-104	-142	-188	-243	-311	-392	-489	-2.008
Total incremental COGS	Million DKK			-	-	-21	-45	-73	-104	-142	-188	-243	-311	-392	-489	-2,008
Sales and distribution (S&D) costs																
Incremental S&D costs based on current level				_	_	-40	-90	-150	-216	-298	-399	-525	-679	-867	-1,097	-4,360
Sales representatives				-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-24
Public Relations (PR) efforts Total incremental S&D costs	Million DKK			-8 -10	-8 -10	-15 - 57	-15 - 107	-20 - 172	-25 - 243	-30 -330	-35 - 436	-40 - 567	-45 - 726	-50 -919	-55 -1,1 54	<u>-346</u> -4,730
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R&D costs																
Incremental R&D costs based on current level						-21	-48	-80	-115	-159	-214	-281	-363	-464	-587	-2,332
Total incremental R&D costs				-	-	-21	-48	-80	-115	-159	-214	-281	-363	-464	-587	-2,332
Administrative costs	MEE DIVI			_		2	-8	12	10	25	24	44	E7	70	00	200
Incremental administrative costs based on current level	Million DKK				_	-3		-13	-18	-25	-34 -2	-44	-57 -2	-73	-93	-368
Wages for health authority advisors	Million DKK			-2 15	-2 -10	-2 7.5	-2	-2	-2	-2		-2		-2	-2	-24
Development of educational material Total incremental administrative costs	Million DKK			-15 -17	-10 -12	-7.5 -13	-2.5 -12	-2.5 -17	-2.5 -23	-2.5 - 30	-2.5 -38	-2.5 - 49	-2.5 - 62	-2.5 - 78	-2.5 -97	<u>-55</u> -447
Total fixed costs	Million DKK			-27	-22	-91	-167	-269	-381	-518	-688	-896	-1,151	-1,461	-1,838	-7,510
Operating profit	Million DKK			-27	-22	52	157	272	399	559	760	1,011	1,321	1,702	2,170	8,353
Operating profit margin				N/A	N/A	32%	42%	44%	45%	46%	46%	47%	47%	48%	48%	

21 Sources: Novo Nordisk's annual report 2023, Case material, Obesity Atlas